King County

Office of Information Resource Management

Law, Safety and Justice Strategic Integration Plan

July 11, 2002

Revised July 16, 2002

In support of the collective goals of the King County Law, Safety and Justice (LSJ) community, the members of the LSJ sub-committee of the Business Management Council mutually endorse this Strategic Integration Plan. We collectively seek to advance this plan and pursue the activities and initiatives both expressed and implied by this plan. The undersigned members therefore encourage and request the sponsorship and support of this plan by the department directors and elected officials within the LSJ community.

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James Crane, Community and Human Services — Date: 7/15/02

Tricia Crozier, King County District Court — Date: 7-8-02

Pat Lee, King County Sheriff's Office — Date: 7-4-02

Barbara Miner, Judicial Administration — Date: July 3, 2002

David Ryan, King County Prosecuting Attorney's Office — Date: July 2, 2002

Paul Sherfey, King County Superior Court — Date: July 1, 2002

Acknowledgements

This document is the culmination of an assessment and business planning effort that was initiated on October 15, 2001. The objective of the planning effort was to develop a comprehensive strategy or vision for justice integration, and create the necessary business plan, financial analysis, operational recommendations, and implementation plan for achieving the strategy.

This project was performed by the Office of Information Resource Management, under the direction of the Law, Safety and Justice Sub-Committee of the Business Management Council – part of the technology governance structure of King County. Additional reports and project deliverables created during this effort are identified in Appendix A of this document.

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1.0 INTRODUCTION AND PROLOGUE

1.1 OBJECTIVES

Members of the King County Law, Safety and Justice (LSJ) community believe it is in the interest of public safety to make criminal information available to decision makers and law enforcement officers. Additionally, the LSJ agencies wish to share information with external agencies, including municipal, state, and federal law enforcement officials, in accordance with several ordinances and laws, and wish to manage and control costs associated with the processing and administration of criminal justice cases.

The collective vision for an integrated Law, Safety and Justice community is as follows:

- Improve justice operations by making relevant information available to decision makers, operations staff, and law enforcement officers in a timely, accurate, and efficient manner.
- Proactively manage costs associated with the processing and administration of criminal justice cases.
- Provide improved public safety capabilities and services for the constituents of King County.

In order to achieve this vision, the goals of LSJ integration are as follows:

- Identify opportunities to improve operations and reduce costs associated with the criminal justice process through the improved management of information.
- Develop technology and communications to automate information sharing and eliminate redundant data entry.
- Implement solutions to streamline operations and improve criminal case management throughout the justice operation.

1.2 PROJECT HISTORY AND SCOPE

1.2.1 Project Scope

The King County LSJ process involves the following agencies and entities:

- Department of Adult and Juvenile Detention
- Department of Judicial Administration
- King County District Court
- King County Prosecuting Attorney's Office
- King County Sheriff's Office
- King County Superior Court

- Office of the Public Defender from the Department of Community and Human Services

The scope of this project is explicitly confined to the interaction and interoperation of agencies with regards to ***criminal proceedings*** and ***criminal case management***, and specifically regarding ***the exchange of information, communication, and documents related to the workflow involved from a time an individual is investigated for a crime until that individual completes their mandated service within a King County detention facility or program***.

1.2.2 Project History and Timeline

The King County LSJ integration effort was initiated in 1997. From 1997 through 2000, the project involved at least three separate projects, two consultant studies, and two technology development projects.

On October 15, 2001, the current planning effort was initiated, culminating with this strategic plan. Assuming this effort progresses, it will involve a program to design the operational and information management models for the county's justice operations, the development of a computing-based solution, and the incremental deployment of that solution.

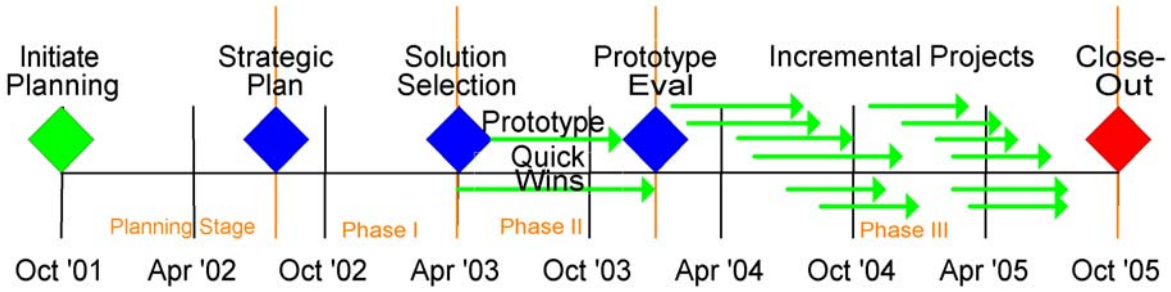


Figure 1: LSJ-I Timeline

Prior to the creation of this strategic plan, other project deliverables were created that documented assessment recommendations, operational analysis, and preliminary technology options. These documents are listed in Appendix A.

1.3 INTEGRATION EMERGENCE AND TIMING

Several factors have converged to result in the emergence of justice integration as an active effort requiring immediate attention. Collectively, these factors contribute to the determination that further delays to King County's efforts will be both financially and operationally detrimental to the county.

Internal Factors

- Master Plan recommendations – In May 2002, a cross-jurisdictional committee transmitted the Adult Justice Operational Master Plan to the King County

Council, addressing issues associated with jail costs. This report specifically recommends "Improve Information Sharing Technology Solutions," and includes several other recommendations that either implicitly or explicitly require improved access to information in order to implement effectively.

- Budget constraints – With the shrinking revenue of the county, agencies must find ways to either streamline operations or reduce services. Since many of the services are mandated by law, the safety and justice agencies must explore alternative methods for operations.

- Knowledge base transition – The staff that developed, implemented, and maintained the information management solutions for the county are at or nearing retirement. In some cases, the knowledge of how to effectively modify and operate applications has already left the county. The next 24 months is an opportune time to consider transition plans, as well as a necessary time to mitigate risks.

- Green River exposure – As has been evident as a result of the Green River case, the county has difficulty organizing criminal case information. For this single (albeit very large) case, the county has appropriated over $1 million to support the electronic and computer-aided capture and collation of information and records.

External Factors

- Public expectations – The public expects certain capabilities of its government, and one of those is the effective use of information in enforcing public safety. With the broader use and understanding of computer-based communications – including the Internet – the public expects police and public safety agencies to share information effectively, and to have computer-based access to existing relevant information.

- Homeland security – The emergence of domestic terrorism and homeland security has placed renewed focus on the ability of first responders to be able to share and access information regarding potential threats. Information sharing has been identified as the most critical aspect of identifying potential threats. Federal grant funds are being made available for these types of initiatives.

- Industry trends – Since 1997, integration has emerged as the principal advancement in the justice industry. This trend has been driven by the success of some agencies to dramatically improve information sharing, and programs such as community based policing. The U.S. Department of Justice has spent millions of dollars researching justice integration, analyzing methods and best practices, and funding state and local integration efforts. As a result, many state and local governments have initiated various levels of justice integration efforts.

- Legislative mandates – Several laws require some level of integrated information sharing. Examples include handgun screening and sex offender registration.

- Other state and local programs – Both Washington State and the City of Seattle have established integration programs with defined projects now underway. These projects will include information management practices that require the county to respond to and participate in such efforts.

2.0 EXECUTIVE SUMMARY

Simply stated, the separate agencies that comprise the county's law, safety and justice operations are unable to share information about criminal cases, crime suspects, and convicted felons. This includes the county's seven agencies/departments, and the 39 law enforcement jurisdictions within the county.

KEY FACTS AND FINDINGS

- The county's LSJ agencies spend 130,000 hours per year re-entering information other justice agencies already have.
- Municipal police file 85 percent of the criminal cases within the county's justice system.
- LSJ integration supports various cross-jurisdictional recommendations from AJOMP.
- If the county does not pursue an LSJ integration strategy, its justice and public safety efforts will lag behind the rest of the country.
- The total costs for LSJ integration will be $8.7-$14.6 million.
- The 10-year tangible benefits for LSJ integration will be approximately $19.5 million.
- The capital funding required for LSJ integration is $7.5 million.
- The most significant risk to LSJ integration is the inability to continue to fund the program in 2004 and 2005.
- LSJ integration will likely impel the county to examine other issues, such as wireless networks, regionalized services, and the future of mainframe computing.
- LSJ integration requires SAC endorsement as part of the technology governance and budget process.

2.1 BUSINESS PROBLEM

Decision makers are unable to obtain complete information about individuals or relevant incidents within the criminal justice system, thereby creating the possibility that an individual will not be managed appropriately at some point during the criminal case process – either by the courts, prosecutor, jail, or police.

In addition to this major issue, the current lack of information sharing presents several business-related problems for the LSJ agencies. In general, the business problems involve:

- Direct costs for manually recreating and managing information
- Poor overall quality of criminal and case information
- An inability to reconcile information
- Timely access to information
- Ancillary costs from inaccurate information and poor communications
- The inability to alter operations in order to properly manage costs

Concurrent to this analysis, other county efforts have examined justice operations. These efforts included the county's 2002 Strategic Technology Plan (STP), and the cross-jurisdictional Adult Justice Operational Master Plan (AJOMP). The STP specifically evaluated justice integration from a technical perspective, and recommends a technology strategy to proceed with such an effort. The AJOMP report makes a recommendation to improve information sharing, and includes other recommendations that require improved information access to be effective.

The county can improve the management of criminal cases, reduce costs associated with those cases, and improve public safety, by sharing and integrating the information within the disparate computer systems of the county. See Section 3.0 for details regarding the business problems.

2.2 IMPACT ASSESSMENT

The county may decide not to proceed with a formal LSJ integration effort. This alternative represents the "option" of "doing nothing" or remaining with the status quo operational and technical environment. By selecting this alternative, the county is deciding, for whatever reason, that the benefits of LSJ integration do not at this time justify the investment or business commitments required.

Based on documented information about the current technical operations of the county, the business plans of the LSJ agencies, and various known county activities, there are general issues and impacts associated with the status quo operations. The likely issues and impacts are:

- If King County proceeds with the status quo, the county will lag behind its peers with regards to justice and public safety.
- The existing application infrastructure will not meet required changes to operations. Criminal case improvement initiatives such as AJOMP will present new requirements that the systems cannot support.
- The existing systems will not support proactive business process reengineering efforts, forcing agencies to cut services to effect budget reductions.
- Technology operations will be at-risk due to staff turnover.
- The county will continue with ad hoc in-house systems development. The resulting environment will likely support status quo operations, and will not address other operational needs.
- External agencies will require King County to respond to integration efforts. King County will respond to such efforts using unplanned point-to-point solutions that will be relatively expensive to implement and costly to maintain.
- The Sheriff's Office will acquire and implement an independent solution. The ability to later leverage that technology for other county agencies will be unconsidered and unknown.
- Other agencies will perform limited and independent integration projects that create a redundant infrastructure.

See Section 4.0 for more information regarding the impacts of the current operational issues.

2.3 RECOMMENDATIONS

The solution recommendations for proceeding with this project cover four recommendations related to design activities, investment priorities, financial management, and program management.

2.3.1 Technical Design Activities

It is ***STRONGLY*** recommended that King County pursue a three-phase effort for LSJ integration – an "LSJ-I Program" – with "Phase I" involving detailed analysis, business modeling, the requirements development. It has been documented by justice industry case studies and analysis reports sponsored by the U.S. Department of Justice that attempts to bypass or shortcut detailed data modeling, process analysis, and requirements development activities result in failed LSJ integration projects.

2.3.2 Investment Priorities

Based on criteria outlined in this document, the current opportunity analysis, and the joint prioritization efforts of the LSJ community, the following are the recommended top 10 investment priorities:

- Initiatives that reduce the costs of the Prosecuting Attorney's Office receiving and reviewing criminal referrals from police
- Initiatives that reduce the jail booking and intake effort (including pre-trial screening and classification)
- Initiatives that provide police officers with improved and comprehensive information about criminal history and activity
- Initiatives that provide criminal case dispositions "upstream" to interested agencies including police
- Initiatives that eliminate situations in which multiple agencies are receiving identical reports and simultaneously entering information into multiple systems
- Initiatives that reduce criminal case paperwork and streamline the filing of criminal cases with the courts
- Initiatives that support the improved management and timely processing of warrants
- Initiatives that improve the calendaring and coordination of court events
- Initiatives that provide self-service capabilities to the public

- Initiatives that provide improved ad hoc reporting capabilities, or consolidated access to information currently available in multiple systems

2.3.3 Funding

The LSJ-I Program as documented in this report will require $7.5 million of capital funding. It is recommended that the county allocate a minimum of $1 million to fund the 2002-2003 efforts. This approach would result in the following:

- Fully supports the completion of the Phase I activities, in line with justice industry best practices
- Supports the initial acquisition and deployment of a base solution, providing a logical transition point in case the county could not further fund a structured program
- Allows 16 months for the county to organize and pursue other funding alternatives

Optimally, the program requires an additional $1 million of funding in 2003 (in addition to the recommended $1 million allocation). However, based on this analysis, ***the LSJ-I Program can accomplish meaningful results in 2003*** with only the minimal recommended funding. If the county is able to secure additional funding in the form of homeland security grants or additional budget appropriation, certain aspects of the project can be expedited in order to deliver additional results with tangible benefits in 2003.

2.3.4 Program Plan

In order to manage LSJ integration it is recommended that the county establish a long-term Program Office. This Program Office will coordinate and manage all LSJ-I related activities, manage budget and funding issues, report progress to management as applicable, and represent the county to associated state and regional integration efforts.

The Program Office will be lead by a Program Manager. The Program Manager will have three distinct reporting responsibilities – to the Office of Information Resource Management, to the LSJ BMC Sub-Committee, and to the Business Sponsor. Within the Program Office, other staff will be required to manage specific aspects of the effort, with defined roles and responsibilities.

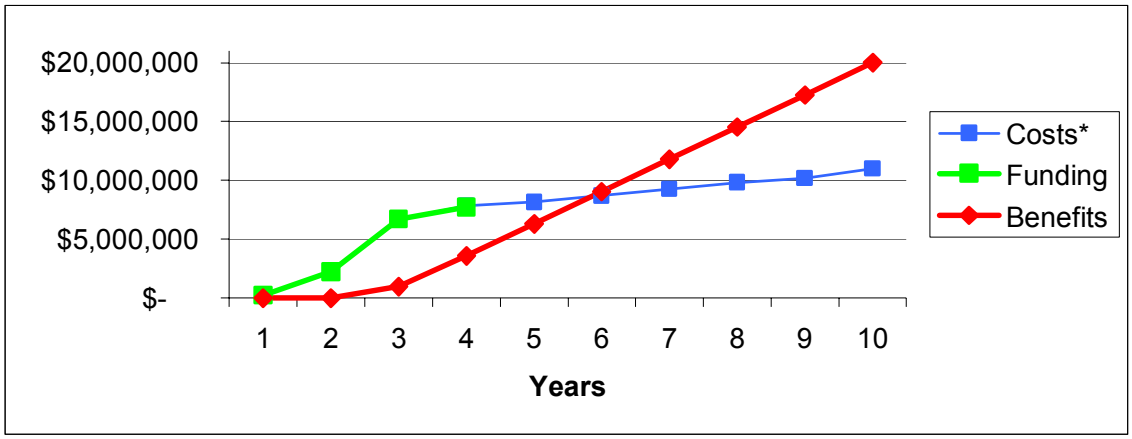
The current work plan for the LSJ-I Program models the scope of the effort, estimates resource and staff requirements, and presents the estimated timing. Based on the current plan, key milestones for the program through 2003 are as follows:

- Program Initiation.....August 22, 2002
- Solution requirements and RFP.....December 2002
- Vendor/solution selection; Integration models....February 2003

- Final implementation plan.....April 2003
- Initial middleware deployment.....July 2003
- Initial pilot/prototype .....December 2003

2.4 BUSINESS CASE

Based on the cost/benefit analysis, the program will require capital funding of approximately $7.5 million. The county will also incur some new post-implementation expenses. The total 10-year benefit of the program for the LSJ agencies will be approximately $19.5 million, with variations depending upon the timing of initial project implementation.



*Costs = Funding spent plus post-implementation costs.

Figure 2: Cost and Benefit Chart for Middleware Integration

If the county chooses to deploy an integrated application suite, spending run-rates for computing services will decrease and future application redevelopment will be avoided. Upon implementation, the annual costs associated with supporting and performing the general operations of King County's LSJ agencies would decrease by $2.24 million to $3.37 million.

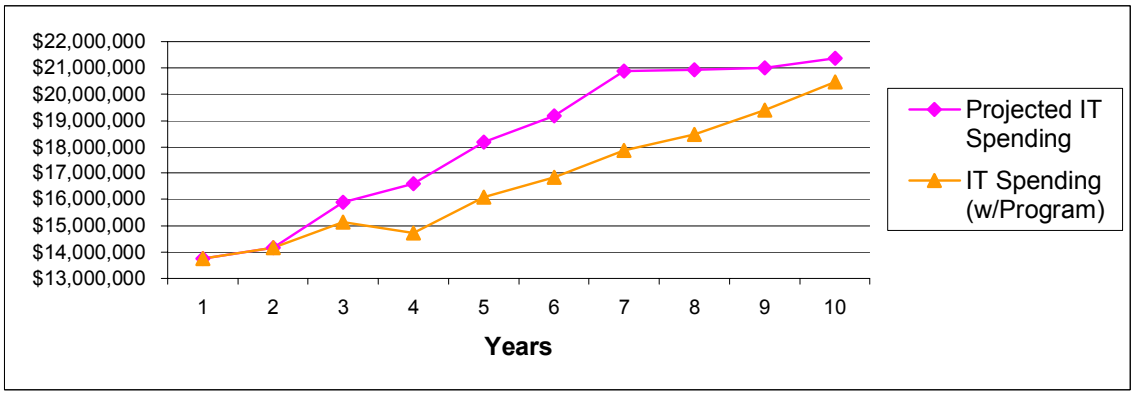


Figure 3: Technology Spending Rates for LSJ Application

2.5 ACTIONS

In order to proceed, the LSJ-I Program requires the endorsement of the Strategic Advisory Council (SAC) as part of the technology governance and budget process. The SAC is the senior council within the county's technology governance structure. The SAC is chaired by the King County Executive, and its membership includes the following people:

- The separately elected officials of the county (the Sheriff, Prosecutor, Assessor, and the Presiding Judges from Superior and District Court)
- Two members of the King County Council
- The county's Chief Information Officer
- Invited members from other public agencies within King County
- Invited members from private industry within King County

The SAC endorsement states the following:

- The SAC supports the stated goals and objectives of the county related to LSJ integration, specifically the desire to improve public safety, eliminate redundant operations, and reduce costs through the improved sharing of information.
- The SAC agrees with the recommendations and business case for this program as outlined in this plan.
- The SAC endorses the allocation of $1 million from the existing Tech Bond funds to fund the 2002-2003 Program Office for LSJ integration.
- The elected officials from the LSJ agencies support this plan, and agree to support the ongoing program.

Within 30 days of approval, the CIO, LSJ BMC Sub-Committee, and the Program Manager will perform those activities required to establish the Program Office and governance, and to establish the LSJ-I Program within the 2003 budget plan. Within 90 days after program definition, the Program Office will have initiated activities that develop the details workflow/data flow analysis, and have initiated the vendor/solution selection process.

3.0 BUSINESS PROBLEM STATEMENT

3.1 PROBLEM STATEMENT

KEY FACTS AND FINDINGS

- The county's LSJ agencies spend 130,000 hours per year re-entering information other justice agencies already have.
- Municipal police file 85 percent of the criminal cases within the county's justice system.
- LSJ integration supports various cross-jurisdictional recommendations from AJOMP.

From KOMO 4 News, March 6, 2002:

> A King County Judge set bail at $350,000 for a level 3 sex offender Seattle police say they found in a downtown hotel room with three young boys. The arrest of Thomas Clarke came 10 days after an employee of the Boylston Hotel called police.
>
> KOMO 4 News learned that a court conviction in 1996 contained a restriction of Clarke being alone, unsupervised, with minors. Police were unaware of those restrictions. On Feb. 23 they removed the kids, but didn't know to arrest Clarke for 10 days.
>
> Prosecutors say they expect child molestation charges to be filed Thursday. Prosecutors also tell KOMO 4 News they will work with judges to try to devise a system, which will communicate sentence restrictions to police.
>
> "Information, if it is to be of any value to anyone, has to be shared," said prosecutor's chief of staff, Dan Satterberg. "This is a dramatic example of how the computer systems that have this information don't talk to each other and aren't accessible by the people who need this information."
>
> (http://www.komotv.com/stories/17189.htm)

As demonstrated by this example, the inability of the safety and justice agencies within King County to access and share information places the public at risk. This risk involves the inability for decision makers to obtain complete information about individuals and events within the criminal justice system, and thereby creates the possibility that an individual will not be managed appropriately at some point during the criminal case process – either by the courts, prosecutor, jail, or police.

The county can improve the management of criminal cases, reduce costs associated with those cases, and improve public safety, by sharing and integrating the information within the disparate computer systems of the county.

3.2 BUSINESS PROBLEM ANALYSIS

The current lack of information sharing presents several business-related problems for the LSJ agencies. These business problems involve the overall quality of criminal information, the costs of operations, and the ability for agencies to react to evolving business requirements.

3.2.1 Information Management

In a 2001 survey conducted by the OIRM, every LSJ agency identified "data sharing" as a short-term business issue, and every agency except the Sheriff reported "redundant data entry" as a short-term issue. In general, the short-term business opportunity is to improve the sharing and migration of information from agency to agency, thus relieving redundant entry operations and improving quality.

The inability of existing systems to share and collectively manage information creates two specific business problems:

1. Redundant efforts: Information obtained by one agency is transmitted via paper documents and reports to other agencies, who recapture the information. A single criminal case, therefore, will have multiple records with redundant documentation, all of which are treated as the system of record by various agencies. At the very least, this redundancy creates systemic inefficiency.

2. Quality and accuracy: Once information exists in multiple sources, it is updated by each agency independently. Additionally, the information may be incorrectly entered into any one system at any time. As a result, the collective information for a single case may have multiple versions that may or may not agree, without any method for the agencies to mutually reconcile the information.

For example, in the case of a suspect's address, the following King County agencies all do independent research and record information at various times without reconciling the accuracy of the information with each other:

- Sheriff, at the time of investigation and/or arrest
- Adult Detention, at the time of booking intake
- Prosecutor, at the time of receipt of referral
- Adult Detention, at the time of pre-trial PR screening
- Prosecutor, at the time of discovery
- District Court, at the time of case filing
- Judicial Administration, at the time of initial case docketing
- Adult Detention, at the time of classification
- Public Defender, at the time of initial interview

In the Adult Justice Operations Master Plan Misdemeanant Workgroup Report published in February 2002, Recommendation #1 addresses reduction in failure to appear rates. The report states that two of the four primary reasons for failing to appear are "inadequate notification of court date" and "incorrect address for defendant." A contributing factor to these problems is the fact that the various agencies do not reconcile the address information they have independently collected.

3.2.2 Interagency Information Exchange

In addition to the failure to move information through the criminal case management process, information is not reconciled and exchanged between agencies independent of that workflow. Once one agency collects information about a case or an individual, it is only passed to other agencies if it is part of the standard exchange of paper-based information within the standard workflow. Information collected later during a case, and dispositions of cases, are not shared with "upstream" agencies, nor are they accessible in an ad hoc or on demand basis.

Again, continuing with the example from the Adult Justice Operations Master Plan Misdemeanant Workgroup Report published in February 2002, Recommendation #1 states that "simple and cost-effective FTA [failure to appear] reduction strategies are proven to significantly reduce FTA rates." The report recommends the following as their top three strategies for reducing FTA rates:

1. "Obtain accurate contact information from defendants." It is likely that King County does, at some point, obtain accurate contact information, but that due to the fact that the information is captured in so many places it is unclear if the correct information is eventually shared with or used by the correct parties.

2. "Update defendant contact information regularly. Share information with relevant agencies and jurisdictions." King County does collect the information regularly, but does not update other agencies' records or share the new data.

3. "Check defendant's custody status prior to issuing a bench warrant." Since the courts do not have ad hoc access into current booking information, such a check cannot be easily performed.

3.2.3 Relevant Costs

The inability for agencies to share basic information concurrent to the management of a criminal case directly results in inefficient operations. There are two specific types of inefficiencies that result in unnecessary costs associated with information management:

1. Direct operational expenses: Based on prior analysis conducted during this project, King County employees spend approximately 130,000 hours per year manually keying data into computers that ***already exists*** in another computer. Money that is spent redundantly entering, updating, and managing data is money that is not spent in evaluating cases, prosecuting criminal cases, or enforcing crime.

2. Secondary operational expenses: When case information is inaccurate or inconsistent between agencies, it creates problems in properly processing criminals and cases. These problems in turn create inefficiency in the overall process that have tangible costs.

Again, continuing with the example from the Adult Justice Operations Master Plan Misdemeanant Workgroup Report published in February 2002, Recommendation #1 specifies five agencies that realize increased costs associated with failures to appear, which are caused in part by incorrect information management:

- Courts – increased court operation expenditures through increased warrant processing, number of hearings, strain on resources and staff
- Jail – increased booking fees, use of jail, strain on staff, increased workload
- Police – must arrest defendants with warrants, increased strain on staff, workload
- Cities – increases costs associated with bookings on warrants and prisoner days associated with warrants
- Prosecuting and defense attorneys – strained resources, increased workload

Therefore, the failure to share and manage simple information between agencies increases expenditures by the courts, jail, police, prosecutor, and other jurisdictions within King County.

3.2.4 Inter-Jurisdictional Information Exchange

King County is a regional provider of justice services for the rest of the county. Approximately 85 percent of all criminal cases handled by the King County Prosecutor are filed by municipal police. Likewise, the King County jail facilities in Kent and Seattle are the primary detention facilities for all jurisdictions within King County. Finally, the majority of misdemeanor and all felony criminal cases in the county are adjudicated within King County's District and Superior Courts.

Most information about criminal cases originates external to the county's LSJ agencies. Additionally, the majority of police who are supporting public safety and relying upon history and case information from the county are municipal police external to the county. Therefore, it is critical that all justice integration efforts support the needs and requirements of these external parties, and be prepared to further support future needs.

The cross-jurisdictional nature of the county's justice operations is exemplified in Recommendation #4 from the Adult Justice Operations Master Plan Misdemeanant Workgroup Report. This recommendation is to "Improve Information Sharing Technology Solutions," and specifically relates to improved handling of bench warrants at both the time a warrant is issued and while a person is in custody. Just this issue explicitly requires that information be exchanged between the following parties:

- King County Department of Adult and Juvenile Detention
- King County District Court
- Washington State Administrative Office of the Courts

- Seattle Municipal Court
- Municipal police through the King County Police Chiefs Association (non county organization)

3.2.5 Criminal Case Management Segregation

In a 2001 survey conducted by the OIRM, agencies stated that the existing operational environment cannot support process changes required to improve case management and control operational costs. As a long-term business issue, agencies require the flexibility to alter, consolidate, or otherwise change any aspect of the case management workflow.

While separation of responsibilities is necessary for practical and legal reasons, stovepipe segregation of information will impede and prevent the improvement that is required if the justice operation is expected to continue as a viable function given the stated conditions.

4.0 OPERATIONS IMPACT ASSESSMENT

Based on the long-term outlook of the LSJ function within King County, analysis and observation of operations throughout the LSJ workflow, and responses and comments to surveys, three statements may be made:

- The criminal caseload within the county will continue to increase as the county population increases.
- In the foreseeable future, county revenues will continue to decrease proportionate to the county population.
- Services and standards for processing criminal cases must remain consistent with legal requirements regarding capabilities, timeliness, and due process.

KEY FACTS AND FINDINGS

- The core LSJ applications were designed and implemented over 25 years ago, and do not support many of the activities that have been added to the county's responsibilities since then.
- LSJ agencies are not able to manage the operational costs of their services due to the inflexible fixed costs associated with information management.
- If the county does not pursue an LSJ integration strategy, its justice and public safety efforts will lag behind the rest of the country.

Assuming all three of these statements are true, it is evident that King County must address very serious challenges within the justice operations of the county. Implicitly, the agencies must adopt a paradigm shift in the methods and operations related to managing criminal cases. However, an assessment of the operational environment indicates that the underlying technology supporting the LSJ operations is restrictive and inflexible, and requires investment to achieve integration.

Additionally, while existing information management efforts – involving both agency operations and the supporting technology – both fail to support more than the minimal information sharing requirements, they have also proven to be the most costly alternatives, thereby restricting county resources.

4.1 CONTRIBUTING TECHNOLOGY ASSESSMENT

While the goals and objectives of LSJ integration are to support public safety and operational efficiency, integration is dependent upon the infrastructure of the underlying technology. The underlying technology supporting LSJ operations was therefore assessed to determine how it contributes to the problems and challenges of information sharing. Currently, the technology that supports the LSJ operations suffers from three significant shortcomings:

1. The applications collectively support only a portion of the operations of the LSJ agencies. (Less than 50 percent of operations are supported by computer processing, based on a previous consultant study.) The core applications were designed and implemented over 25 years ago, and do not support many of the activities that have been added to the county's responsibilities since then.

2. The legacy systems are inflexible and cannot be easily altered to support emerging business requirements. They employ point-to-point communications and linear program logic that cannot be altered or leveraged to support modular or object-oriented processing activities.

3. The core applications were specifically designed to be segregated and independent from each other. The data within the systems does not incorporate common indexes or keys, and the county has never employed a common systems design or data model for the justice enterprises.

As previously stated, the LSJ community must be able to share information, dynamically access information across agencies, and have the flexibility to develop a new business or operational paradigm for criminal case management. These requirements are hindered by the existing IT infrastructure, and in fact cannot be achieved within the confines of the existing infrastructure.

The current cost estimate for the redevelopment of the LSJ agencies' technology infrastructure is $10-$18.5 million. This estimate is based on a preliminary analysis of the applications, and the current estimates of replacement projects occurring in 2002. However, in a more extensive consultant study in 1998, the estimate for custom redevelopment of the LSJ applications was $27-32 million.

4.2 EXISTING COST STRUCTURE

There are two issues associated with the existing cost structure for managing information:

1. The cost of manually handling information flow within the LSJ agencies

2. The cost of operating the technical environment in which the information resides

As previously stated, King County employees spend approximately 130,000 hours per year manually keying data that ***already exists*** in one computer into another computer. The financial costs related to this effort comprise a large portion of the tangible benefits associated with integration, and are addressed in detail in **Section 6, Business Case Analysis**, of this document.

The broader business issue associated with this problem is the fact that, given the inflexible nature of the existing technology, agencies are unable to eliminate or reduce this work. As a result, ***information and records management work within the LSJ agencies is an inflexible, fixed cost***. Therefore, mandated budget cuts cannot be absorbed by the back-office or clerical units of these departments. They instead will impact the core services of the county, requiring the agencies to reduce service and quality standards in order to comply with the budget.

Additionally, a consulting study performed by Pacific Technology, Inc. (PTI) determined that given the options of either redeveloping all mainframe applications,

migrating off the mainframe, or simply proceeding with the existing "status quo" operations, that "status quo" was the most expensive alternative. Currently, the LSJ agencies pay approximately 25 percent of the mainframe's fixed costs.

Costs in millions (2000 dollars – not inflation indexed)	Invest	Migrate	Status Quo
One-time Costs	$41.6	$42.9	$41.6
15-year Operation & Maintenance Costs	$64.8	$47.1	$77.7
Total 15 Year Costs	**$106.4**	**$90**	**$119.3**
Long-term Annual O&M Costs	$5.7	$4.3	$5.7

Table 1: 15 Year Cost Comparisons for Mainframe

What this demonstrates is that any alternative to improve the application environment for the LSJ agencies requires a substantial up-front investment, but results in lower overall costs. Remaining with the existing environment incurs larger annual costs and still requires similar one-time investment, but the investments will be spread out over a longer term.

4.3 STATUS QUO IMPACT ASSESSMENT

The county may decide to not proceed with a formal LSJ integration effort. This alternative represents the "option" of "doing nothing" or remaining with the status quo operational and technical environment. By selecting this alternative, the county is deciding, for whatever reason, that the benefits of LSJ integration do not at this time justify the investment or business commitments required.

Based on documented information about the current technical operations of the county, the business plans of the LSJ agencies, and various known county activities, there are general issues and impacts associated with status quo operations. The educated conclusions about those issues and impacts are as follows:

- If King County proceeds with the status quo, the county will lag behind its peers with regards to justice and public safety. By the end of 2003, King County would likely be the largest county in the United States without a centrally managed LSJ integration program. King County is the 12th largest county by population in the U.S. Of the 15 largest counties in the U.S., 10 already have known LSJ integration programs.

- The existing application infrastructure will not meet required changes to operations. It has already been documented that the existing applications fail to support the majority of the LSJ operational requirements. Criminal case improvement initiatives such as AJOMP will present new requirements that the systems cannot support. The result will be either an inability to meet those requirements, or additional and heretofore undocumented expenditures required in an unplanned manner.

- The existing systems will not support proactive business process reengineering efforts, forcing agencies to cut services to effect budget reductions. Without an ability to modify or streamline the back-office or clerical operations associated with criminal case management activities, LSJ agencies will need to reduce goals regarding service levels and work quality in order to achieve any required budget cuts.

- Technology operations will be at-risk due to staff turnover. By the end of 2004, the staff that originally developed, implemented, and has maintained the majority of the core LSJ systems will have retired. This loss of knowledge capital will complicate the ability to alter existing applications, will likely slow modification efforts, and could create operational risk in the event of application failures.

- The county will continue with ad hoc in-house systems development. If the agencies pursue independent application redevelopment efforts over the next seven years, the total costs will exceed the costs of a managed application replacement. Additionally, since the replacement projects will be performed as independent efforts implemented over an extended period, the resulting environment will support only status quo operations, will not address other operational needs, and will have very limited information sharing. The effort to incrementally redevelop applications has already begun, as DAJD has projects scheduled for 2002 to replace two applications, and Superior Court is actively replacing multiple case management applications.

- External agencies will require King County to respond to integration efforts. Beginning in 2003, the State of Washington and the City of Seattle will implement information sharing programs that request King County to participate. It is likely that some programs will involve requirements imposed on the county by law. King County will likely respond to such efforts using unplanned point-to-point solutions that will be relatively expensive to implement and costly to maintain.

- The Sheriff's Office will likely acquire and implement an independent solution, funded by a grant source. Due to certain initiatives, the Sheriff's Office requires some kind of integration capability. The ability to later leverage that technology for other county agencies will likely be unconsidered and unknown.

- Without a central integration effort, but driven by business requirements, other agencies will perform limited and independent integration projects. As a result, the county will acquire multiple integration technologies, incurring greater software costs and greater ongoing management costs than would have resulted from a single solution. The benefits of such projects will be unclear.

4.4 THE INTEGRATED JUSTICE VISION AND SUCCESS FACTORS

The vision of an integrated justice environment is that agencies and jurisdictions in King County will have the capability to share criminal justice information "across

time and space" throughout the county. The workflow of a criminal justice case would include the following:

- Various police jurisdictions will be able to electronically collaborate with each other regarding existing cases or suspects by having seamless access to RMS systems and regional investigation information.

- Police in the field will have direct and real-time access to information about criminal history, prosecutor case filing decisions, and court case results.

- The booking of suspects into the jails will be a paperless process reducing data entry and freeing jail guards to better manage the population.

- Case referrals to the King County Prosecutor will be expedited as information will be transmitted electronically rather than sent via paper. As a result, errors will be reduced, the processing of the referral will be more timely, and clerical costs associated with redundant data entry will be eliminated.

- Criminal cases will be filed with the courts electronically, expediting the processing of cases, and improving the ability to share discovery with the Public Defender and defense council.

- Daily management of the jail population will be improved by providing jail staff with information as they need it, through consolidated sources.

- Warrants filed against individuals will be handled more efficiently. Individuals already in custody will be identified and served immediately, reducing the number of appearances they must make in court, and reducing their overall detention time.

- The public in general will have new services and new ways to interact with the criminal justice process, including the ability to review case, criminal, and appropriate public records via the Internet.

In general, the police in King County will be able to better protect and serve the community, the jail and prosecutor will function more efficiently, and the courts will better support the needs of the public.

5.0 SOLUTION RECOMMENDATIONS

KEY FACTS AND FINDINGS

- King County should establish a Program Office to perform LSJ integration, with initial efforts focused on operation modeling and requirements analysis.
- In independent analysis, the 2002 Strategic Technology Plan recommended LSJ integration, broader technology integration, and improved data management, as county priorities.

The defined objectives of the Planning Stage were to identify the business and operational opportunities associated with integration, and create a business plan and strategy for recovering and proceeding with a critical project that had floundered and stalled. Therefore, the recommendations for proceeding with this project cover the following four areas:

1. Recommendations for a "Phase I" of the project that will establish the comprehensive technical and operational framework for the LSJ integration effort

2. Recommendations for investment priorities, which in turn represent implementation priorities

3. Recommendations for the funding and financial management of the program

4. Recommendations for program management and governance

These recommendations are based on the prior project efforts that have included analysis of both King County operations and industry best practices and principles. Some of the key premises and principles regarding justice integration are described in Appendix B.

5.1 RECOMMENDED BUSINESS AND SOLUTION DESIGN ACTIVITIES

Based on best practices for both integration projects and the LSJ industry, it is critical to perform the following activities before acquiring software solutions and proceeding with integration activities:

- Perform a detailed analysis of existing operations within the cross-agency workflow of a criminal case, and create a documented operational "end state" model that achieves the objectives of the known improvement opportunities.

- Construct entity-level data exchange models that demonstrate how information moves throughout the workflow, and create data model standards that document the methods in which various systems will receive or use the data (subscribe, push, pull, etc.).

- Complete a technical gap analysis of existing systems based on the end state operations and data exchange models.

- Develop technical requirements to specifically bound and define the necessary solution, and to be used in evaluating candidate vendor products and tools.

It has been documented by justice industry case studies and analysis reports sponsored by the U.S. Department of Justice that attempts to bypass or shortcut these activities result in failed LSJ integration projects. Additionally, based on case studies and information published by other counties, this effort has typically required 12 to 24 months, with costs ranging from $500,000 to $2.3 million.

It is ***STRONGLY*** recommended that King County pursue a three-phase effort for LSJ integration, with "Phase I" involving detailed analysis, business modeling, and requirements development. Based on the ability to leverage lessons learned in the industry and the past efforts of both the county and the state, this phase is estimated to take eight months and require $300,000 of funding.

5.2 RECOMMENDED INVESTMENT PRIORITIES

In general, the model for the LSJ-I Program prioritizes incremental project efforts based on the following criteria:

- Business opportunities that involve a single operation or information exchange scenario will be combined into logical projects.
- Projects will be prioritized based on:
  - Tangible payback
  - Contribution to public safety objectives
  - Collective consensus of the LSJ stakeholders

Based on the above criteria, the current opportunity analysis, and the joint prioritization efforts of the LSJ community, the following are the recommended top 10 investment priorities:

- Initiatives that reduce the costs of the Prosecuting Attorney's Office receiving and reviewing criminal referrals from police
- Initiatives that reduce the jail booking and intake effort (including pre-trial screening and classification)
- Initiatives that provide police officers with improved and comprehensive information about criminal history and activity
- Initiatives that provide criminal case dispositions "upstream" to other interested agencies
- Initiatives that eliminate situations in which multiple agencies are receiving identical reports and simultaneously entering information into multiple systems
- Initiatives that reduce criminal case paperwork and streamline the filing of criminal cases with the courts

- Initiatives that support the improved management and timely processing of warrants
- Initiatives that improve the calendaring and coordination of court events
- Initiatives that provide self-service capabilities to the public
- Initiatives that provide improved ad hoc reporting capabilities, or consolidated access to information currently available in multiple systems

The county must acquire some integration tool prior to initiating specific projects. As previously stated – and consistent with industry best practices and lessons learned – the county must develop comprehensive workflow models and information/data flow models prior to selecting a technical solution.

5.3 RECOMMENDED PROGRAM FUNDING

The financial analysis for this effort (reported in detail in **Section 6, Business Case Analysis**, of this document) is based on a complete review of all estimated costs for all related aspects of the effort. This does ***NOT*** represent the requirements for capital funding, as those costs include the cost of internal support resources and ongoing operational costs that would continue regardless of the project.

The LSJ-I Program as documented in this report will require $7.5 million of capital funding. It is recommended that the county allocate $1 million for funding the 2002-2003 efforts. This approach would result in the following:

- Fully supports the completion of the Phase I activities described in the recommendation in Section 5.1, in line with justice industry best practices
- Supports the initial acquisition and deployment of the base tools required for accomplishing the priorities listed in Section 5.2, providing a logical transition point in case the county could not further fund a structured program
- Allows 16 months for the county to organize and pursue other funding alternatives

Specific funding recommendations are addressed in more detail in **Section 6.3, Funding and Investment Analysis**.

5.4 RECOMMENDED IMPLEMENTATION APPROACH

In order to manage LSJ integration it is recommended that the county establish a long-term Program Office. This Program Office will coordinate and manage all LSJ-I related activities, manage budget and funding issues, report progress to management as applicable, and represent the county to associated state and regional integration efforts.

This Program Office will be established as a defined entity, overseeing multiple projects. At a minimum, it will manage the initial projects identified to support this plan, currently extending through September 2005.

This recommendation is addressed in more detail in **Section 7, Program Plan and Approach**.

5.5 ALIGNMENT TO STRATEGIC TECHNOLOGY PLAN

Concurrent to this planning effort the county has developed its Strategic Technology Plan (STP). This plan, published May 17, 2002, addresses universal IT issues, specific technology initiatives and opportunities, and general principles associated with technology management. LSJ integration is subordinate to the Strategic Technology Plan, and as a result aligns to that plan.

Strategy recommendation D2 of the STP recommends that the county "develop technology design/plans for significant initiatives and projects." The STP specifically calls out the Law, Safety, and Justice system as requiring such a plan. This strategic plan represents compliance with that recommendation.

Although the county STP was developed independent of the LSJ planning effort, the STP includes strategy recommendation C8 "Design and implement a common architecture to integrate workflow between Law, Safety, and Justice agencies." The general findings within the STP concur with the findings of this LSJ planning effort. Within the business case section of this recommendation, the STP states the following:

> Given the opportunities targeted by the County, the costs of deployment may be roughly estimated to be in the low eight-figure range. When benefits are weighed against such costs, payback could occur within 10-plus years based upon early estimates of weekly hourly savings. For projects of this size, this kind of financial payback is considered substantial. Given the amount of work occurring nationwide in this arena, more feasibility information is becoming available about these kinds of projects and may be used as a basis for justifying going forward with this strategy. Further analysis is considered necessary to pinpoint the areas in which highest payback may be achieved.

The STP provides a high-level definition of tasks and timing for such an integration effort that shows various detailed analysis being performed within nine months, and a "proof of concept" completed during "year 2" of the project. This timeline roughly aligns to and agrees with the work plan in this document, which recommends an eight-month "Phase I" followed by the "Phase II" deployment of the baseline solution.

The STP also identifies the LSJ operations as a potential candidate for a commercial package (COTS) system, in strategy C4 "Purchase and integrate top-

quality commercially packaged software wherever possible and cost-effective – and with minimal customization."

In addition to overall consistency with the recommendations in the STP related to LSJ integration, this project also aligns to the "Guiding Principles for Information Technology".

Guiding Principles overview: The purpose of the Guiding Principles is to promote the use of technology to achieve efficiency, customer service, public access to government, and transparency and accountability for decision making. Through the stated goals, defined business opportunities, and business plan review and approval process, the LSJ-I Program aligns to these concepts.

Principle 1, Central Review and Coordination of Information Technology: This Guiding Principle states that technology investments should be coordinated at a countywide level. By the nature of this project, the structure of the project oversight/governance, and the proposed program structure, the LSJ-I Program is being coordinated as a capital investment, managed by and benefiting multiple agencies.

Principle 2, Information Technology Enables Effective and Efficient Service Delivery: The several points of this Guiding Principle involve the development of a business case, examination of commercial off-the-shelf (COTS) solutions, directly relating investments to improvements, and limiting development on legacy platforms. This project explicitly conforms to all aspects of this principle.

Principle 3, Information Technology Standards: This Guiding Principle involves compliance with technology, operational, and project management standards. While this project has not yet made any decisions regarding technology, all future solution evaluation and program management activities will comply with county standards.

Principle 4, Access to Information and Services: This Guiding Principle specifically states that the county should "ensure seamless self-service access to information," and should use web technologies and interfaces when appropriate. These are precisely the issues associated with the existing environment this project will address.

Principle 5, Business Process Improvement: This Guiding Principle states that the county should adopt industry best practices and implement those practices in a cross-agency or end-to-end process environment. Again, it is expressly the goal of the LSJ-I Program to achieve this principle and overcome limitations that prevent process improvement and best practices within the existing criminal justice environment.

Principle 6, Privacy and Security: This Guiding Principle directly addresses the need to ensure the proper protection of data and information. Given the nature of this project, privacy and security will be critical components of the integration solution, and this project will ensure compliance with this principle.

6.0 BUSINESS CASE ANALYSIS

The financial analysis for this project is based on the standard cost/benefit model distributed by the OIRM. In estimating project costs and building the benefit model, the following assumptions were made:

- The LSJ-I effort will be a program with several subordinate projects. This program will continue from August 2002 through its completion in 2005.
- The current cost for IT support as charged to King County LSJ agencies is $64.50 per hour.
- IT support rates will increase at a rate of 10 percent biannually.
- All other recurring costs will increase at a rate of 5 percent annually.
- Project costs include all costs for all employees allocated to the program and all sub-projects, including the burdened salaries of employees assigned by LSJ agencies to support project tasks.
- In all cases, the LSJ-I Program involves a detailed "Phase I." Regardless of the solution, Phase I has a similar scope, structure, and cost model.
- For benefits associated with reductions in LSJ agency staff, current hourly salaries were estimated at $30 per hour across the board and were not burdened.
- The total initial cost of integration software and supporting hardware will be $1.5 million.
- The initial license fee for an integrated COTS application suite will be $5 million.
- Every solution will have future expenses associated with hardware upgrades, software upgrades, and ongoing maintenance and support.

KEY FACTS AND FINDINGS

- The total costs for LSJ integration will be $8.7-$14.6 million.
- The 10-year tangible benefits for LSJ integration will be approximately $19.5 million.
- The total capital funding required for LSJ integration is $7.5 million.
- Meaningful progress regarding LSJ integration can be achieved in 2002-2003 with $1 million of capital funding.
- While some counties have spent over $39 million for their integration projects, King County will leverage best practices and lessons learned to perform integration at less cost than other similar counties.
- Homeland security explicitly relates to information sharing, with the federal government increasing funding for information sharing initiatives by 466% in 2003.

6.1 COST/BENEFIT ANALYSIS

Since there are two possible solution alternatives – middleware or an integrated application – two separate cost/benefit analysis models are required.

6.1.1 Cost/Benefit Summary

Based on the cost/benefit analysis, the following general summary statements can be made:

- The cost of the LSJ-I Program will be $11.2 to $12.8 million.
- The total 10-year cost of the program – including program costs, increases to IT operational costs, and resulting IT efficiencies – will be $8.7 to $14.6 million.
- The capital funding requirements for the proposed LSJ-I Program will be approximately $7.5 million.
- The total 10-year benefit of the program for the LSJ agencies will be approximately $19.5 million, with variations depending upon the timing of initial incremental project implementation.
- Depending upon the solution and timing, the net 10-year benefit for the county associated with LSJ integration would be $5.42 million to $10.6 million.
- Upon full implementation, the annual costs associated with supporting and performing the operations of King County's LSJ agencies would decrease by $2.24 million to $3.37 million.

6.1.2 Middleware Integration Cost/Benefit Model

A middleware integration solution involves a program with incremental projects phased over 36 months, with a total cost of $11.26 million. After implementation, the county would have a new middleware integration infrastructure that would add incremental cost to the existing infrastructure management costs. These costs would result in a net increase of annual IT costs of approximately $500,000. As a result, the total 10-year costs of the LSJ-I Program would be $14.55 million.

Upon full implementation, the county's LSJ agencies would realize tangible benefits of $2.74 million annually. These benefits would begin to be realized incrementally, as sub-projects within the LSJ-I Program are implemented. As a result, the total 10-year benefit of the LSJ-I Program would be $20.02 million.

Form 1/ Summary, Cost Benefit and Cash Flow Analysis **Project** LSJ-I Program

	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	TOTAL
TOTAL OUTFLOWS	453,573	3,466,958	5,714,875	1,761,825	302,500	552,500	532,750	582,750	366,025	816,025	14,549,780
TOTAL INFLOWS	0	0	973,404	2,603,604	2,740,104	2,740,104	2,740,104	2,740,104	2,740,104	2,740,104	20,017,632
NET CASH FLOW	(453,573)	(3,466,958)	(4,741,471)	841,779	2,437,604	2,187,604	2,207,354	2,157,354	2,374,079	1,924,079	
INCREMENTAL NPV	NA	(3,497,968)	(7,450,963)	(6,790,449)	(4,990,259)	(3,469,728)	(2,025,721)	(697,440)	678,295	1,727,677	
Cumulative Costs	NA	3,920,530	9,635,405	11,397,230	11,699,730	12,252,230	12,784,980	13,367,730	13,733,755	14,549,780	
Cumulative Benefits	NA	0	973,404	3,577,008	6,317,112	9,057,216	11,797,320	14,537,424	17,277,528	20,017,632	

Cost of Capital	Breakeven Period - yrs.*		NPV $	IRR %
	Non-Discounted	Discounted		
6.25%			1,727,677	11.32%

* - "Non-Discounted" represents breakeven period for cumulative costs and benefits (no consideration of time value of money).

* - "Discounted" considers effect of time value of money through incremental Net Present Value.

Table 2: Summary Cost/Benefit Spreadsheet for LSJ-I Program, Middleware Integration

The input spreadsheets that document the details about program costs and benefits for the middleware integration solution are included as Appendix C of this document.

6.1.3 Integrated Application Cost/Benefit Model

An integrated application solution involves a project that is phased over 36 months, with a total cost of $12.8 million. After implementation, the county would have a new core business application that would add incremental cost to the existing infrastructure management costs. However, the county would also retire approximately 12 to 15 other applications that currently require ITS support. The result is a net ***decrease*** in annual IT costs of approximately $625,000. As a result, the total 10-year costs of the LSJ-I Program would be $8.74 million.

Upon full implementation, the county's LSJ agencies would realize tangible benefits of $2.74 million annually. These benefits would begin to be realized incrementally, as certain modules of the replacement application are implemented in a phased rollout. As a result, the total 10-year benefit of the LSJ-I Program would be $19.3 million.

Form 1/ Summary, Cost Benefit and Cash Flow Analysis **Project** LSJ-I Program

	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	TOTAL
TOTAL OUTFLOWS	453,573	5,541,283	6,006,700	(103,280)	(595,292)	(345,292)	(514,822)	(464,822)	(846,301)	(396,301)	8,735,445
TOTAL INFLOWS	0	0	448,084	2,417,248	2,740,104	2,740,104	2,740,104	2,740,104	2,740,104	2,740,104	19,305,956
NET CASH FLOW	(453,573)	(5,541,283)	(5,558,616)	2,520,528	3,335,396	3,085,396	3,254,926	3,204,926	3,586,405	3,136,405	
INCREMENTAL NPV	NA	(5,335,433)	(9,969,687)	(7,991,917)	(5,528,700)	(3,384,144)	(1,254,836)	718,434	2,796,689	4,507,266	
Cumulative Costs	NA	5,994,855	12,001,555	11,898,276	11,302,983	10,957,691	10,442,869	9,978,047	9,131,746	8,735,445	
Cumulative Benefits	NA	0	448,084	2,865,332	5,605,436	8,345,540	11,085,644	13,825,748	16,565,852	19,305,956	

Cost of Capital	Breakeven Period - yrs.*		NPV $	IRR %
	Non-Discounted	Discounted		
6.25%			4,507,266	15.86%

* - "Non-Discounted" represents breakeven period for cumulative costs and benefits (no consideration of time value of money).

* - "Discounted" considers effect of time value of money through incremental Net Present Value.

Table 3: Summary Cost/Benefit Spreadsheet for LSJ-I Program, Integrated Application Deployment

The input spreadsheets that document the details about program costs and benefits for the integrated application solution are included as Appendix D of this document.

6.1.4 Tangible Benefits

The tangible benefits of integration relate directly to the 10 quantitative opportunities documented during the Planning Stage of this project. For the purposes of calculating the tangible benefit for the LSJ agencies, the current operations were evaluated and a "likely" hourly reduction amount identified. This estimated work reduction was then further reduced to 80 percent to determine an adjusted hours savings per week.

Opportunities:	Assmt Alignment	Business Alignment	Task Hrs/Week	Agency Est Concurrence	Primary Beneficiary	Adj Hours	Annual Bene
1 - Referral Filing: Electronic submission of police referrals	High	High	500	75%	Prosecutor	300	$ 468,000
2 - Prosecutor Case Filing: Improved creation of filing documents	Medium	High	150	75%	Prosecutor	90	$ 140,400
3 - Jail Intake and Booking: Electronic submission of booking documents	Medium	Medium	3,060	20%	DAJD	489.6	$ 763,776
4 - Jail Classification: Improved access to required classification information	Low	Low	240	50%	DAJD	96	$ 149,760
5 - District Court Processing: Electronic submission of police information	High	Medium	350	75%	District Ct	210	$ 327,600
6 - Court Calendaring: Coordinated and computerized court event scheduling and management	High	High	Unk	Unk	Multi	Unk	Unk
7 - Public Inquiry Response: Web availability of public court information	Low	Medium	240	80%	Multi	153.6	$ 239,616
8 - Criminal History Research: Improved access to criminal history information	Medium	Medium	160	50%	Prosecutor	64	$ 99,840
9 - Case Results Update: Electronic sharing of updated case status and information	Medium	Medium	480	67%	Multi	257.28	$ 401,357
10 - Jail Disposition Mgmt: Improved access to required program eligibility information	Medium	Medium	240	50%	DAJD	96	$ 149,760
			5,420				

Table 4: Tangible Benefit Calculation

While not identified as quantified benefits for the current cost/benefit analysis, application integration reduces application develop and maintenance efforts required on the underlying legacy systems, resulting in tangible cost savings. King County's Strategic Technology Plan (STP) cites five potential tangible benefits associated with general integration/EAI programs:

- Reduced cost of writing and maintaining point-to-point, single-use integration interfaces
- Decreased deployment times for new application integration projects, allowing the County to successfully implement enterprise applications in a shorter time frame because of shorter development cycles for the integrations
- The extended life of legacy systems through the integration of new functionality and data retrieval methods as opposed to completely replacing these older applications
- Operational system productivity gain (e.g., system response, load and processing time) as a result of increased efficiencies brought about by the integration
- Increased ability to handle currently unforeseen data and application mergers with other governmental entities in a cost-effective and timely manner

The STP also cites a relevant example of a government agency implementing EAI to address technology and operational challenges that appear very similar to King County's LSJ issues, and realizing tangible results:

> A particularly relevant example of the beneficial use of EAI is the Idaho National Engineering and Environmental Laboratory. This federal agency was able to make of use legacy VSAM and Adabas data through an EAI application that provided data and reports to users in a unified format through a web-browser interface. "Before this new application was implemented, users had to enter four different applications to have access to this data. Now users can run one report and, by following the hyperlinks, access information from the main applications." An extensive ROI study was completed by the agency, which documented estimated break-even results in twenty-six months. (Source: http://www.intelligenteai.com/feature/010216/feat1.shtml)

6.1.5 Intangible Benefits

The intangible benefits of integration relate directly to the qualitative opportunities documented during the Planning Stage of this project. These opportunities provide a variety of new public services and additional capabilities for the LSJ community. Specifically, LSJ integration will provide the following known intangible benefits:

- New public services for accessing court, criminal, and criminal case public information
- Regional support for law enforcement investigation and collaboration across all jurisdictions in King County
- Updated case and criminal information to inform "upstream" agencies of case results (example: inform police of case dispositions)
- Improved capabilities for ad hoc reporting for facility management, trend analysis, workload management, and decision support
- Introduction of paper reduced operations and electronic records filing
- Infrastructure for improved interaction with other agencies outside the criminal justice community, such as health services

In addition, the integrated infrastructure provides an environment for further improvement and process engineering regarding criminal case management. As a result, it is likely the various agencies will be able to identify further costs savings, operational improvements, or new capabilities for supporting public safety and managing criminals and criminal cases in the courts and jails.

6.2 PEER COST COMPARISONS

Various counties have defined integration differently, with different goals and different technology approaches. The estimated ***high-end*** integration project cost compares as follows to known and documented project costs for other similar jurisdictions in the United States:

County	County Pop. (rank)	Metro Statistical Area Population (rank)	County LSJ Project Costs (*=estimated)	Project Scope
Maricopa County, AZ	3.1 million (4)	Phoenix/Mesa – 3.3 million (14)	$39 million*	Unknown
Miami-Dade County, FL	2.3 million (8)	Miami/Ft Lauderdale – 3.9 million (12)	$15 million*	Unknown
King County, WA	**1.7 million (12)**	**Seattle/Tacoma/Bremerton – 3.6 million (13)**	**$12.8 million***	**Application Integration for 7 county agencies**
Broward County, FL	1.6 million (15)	Miami/Ft Lauderdale – 3.9 million (12)	$25 million*	Application redevelopment for 5-10 county agencies
Sacramento County, CA	1.2 million (29)	Sacramento/Yolo – 1.8 million (25)	$37 million*	Application integration for 22 county agencies plus 15 municipal jurisdictions
Hennepin County, MN	1.1 million (32)	Minneapolis/St. Paul – 3.0 million (15)	$13.9 million	Application integration for 8 county agencies
Fulton County, GA	800,000 (55)	Atlanta 4.1 – million (11)	$27.3 million	Application redevelopment for 8-12 county agencies

Table 5: County LSJ Cost Comparisons

6.3 FUNDING AND INVESTMENT ANALYSIS

The cost and benefit models described in this document are based on a continuous program. Additionally, the program costs represent true estimated costs for all related expenses, ***not all of which require capital funding***. The LSJ-I Program will be a multi-year effort with multiple stages and incremental projects. With a strong program management office in place, a consistent technology strategy, and defined business goals, the program can be segmented into logical parts and performed as funds become available. Such an approach can have a negative impact on both overall costs and the timing of benefits, but can be managed in a manner that contributes to a successful project.

6.3.1 Minimum Funding Requirements

The LSJ-I Program as documented in this report will require approximately $7.5 million of capital funding. As stated in **Section 5.0, Solution Recommendations**, it is recommended that the county allocate $1 million for funding the 2002-2003

efforts. The county would then be required to pursue an additional $6.5 million in 2003-2005 to accomplish the full program.

6.3.2 Debt Services Funding

The county may pursue bond sources to fund the LSJ-I Program. If this is considered a valid alternative, the county may decide to support only the capital funding requirements of the program, or may fund the entire cost of the program.

Technology Bond Debt Service - Based on Cash Needs										
		2003	2004	2005	2006	2007	2008	2009	2010	Total
Cash Needed by Year		**1,000,000**	**4,500,000**	**1,000,000**						**6,500,000**
2003 Tech Bond		15,000	227,792	227,792	227,792	227,792	227,792			1,153,958
2004 Tech Bond			67,500	1,025,062	1,025,062	1,025,062	1,025,062	1,025,062		5,192,812
2005 Tech Bond				15,000	227,792	227,792	227,792	227,792	227,792	1,153,958
Total		**15,000**	**295,292**	**1,267,854**	**1,480,646**	**1,480,646**	**1,480,646**	**1,252,854**	**227,792**	**7,500,728**
Annual Benefit		**-**	**973,000**	**2,417,000**	**2,740,000**	**2,740,000**	**2,740,000**	**2,740,000**	**2,740,000**	
Cash Flow Balance		**(15,000)**	**677,708**	**1,149,146**	**1,259,354**	**1,259,354**	**1,259,354**	**1,487,146**	**2,512,208**	
Assumptions										
Interest rate	**4.5%**									
Month of the sale	**8**									
Term assumption	**5**									

Table 6: Debt Service Schedule for Capital Funding

Technology Bond Debt Service - Based on Cash Needs										
		2003	2004	2005	2006	2007	2008	2009	2010	Total
Cash Needed by Year		**3,900,000**	**5,700,000**	**1,600,000**						**11,200,000**
2003 Tech Bond		58,500	888,387	888,387	888,387	888,387	888,387			4,500,437
2004 Tech Bond			85,500	1,298,412	1,298,412	1,298,412	1,298,412	1,298,412		6,577,562
2005 Tech Bond				24,000	364,467	364,467	364,467	364,467	364,467	1,846,333
Total		**58,500**	**973,887**	**2,210,800**	**2,551,266**	**2,551,266**	**2,551,266**	**1,662,879**	**364,467**	**12,924,332**
Annual Benefit		**-**	**973,000**	**2,417,000**	**2,740,000**	**2,740,000**	**2,740,000**	**2,740,000**	**2,740,000**	
Cash Flow Balance		**(58,500)**	**(887)**	**206,200**	**188,734**	**188,734**	**188,734**	**1,077,121**	**2,375,533**	
Assumptions										
Interest rate	**4.5%**									
Month of the sale	**8**									
Term assumption	**5**									

Table 7: Debt Service Schedule for Full LSJ-I Program (Middleware Solution Model)

6.3.3 Alternative Funding Sources

In order to proceed with the LSJ-I Program under the optimal schedule established by the initial plans, the program requires another $1 million of funding in 2003 (in addition to the previously recommended $1 million allocation). A specific and known source for these funds has not been identified at this time. However, there are six potential sources for funding that will be explored during the next six months.

1. Homeland security grants: According to a document published by the National Governors Association, the proposed 2003 federal budget will increase spending specifically earmarked for sharing information to support homeland security by 466 percent. The original 2002 federal money to support information sharing was $155 million. The proposed 2003 amount is $722 million. King County will organize resources to pursue these funds.

2. Other federal and private grant programs: In conjunction with these efforts, King County will also pursue other grant opportunities that relate to improving public safety and justice through information sharing.

3. King County budget: It is possible for the county to allocate budget funds to the LSJ-I Program for fiscal year 2003. Such an action would guarantee that the program would continue to proceed at an optimal rate throughout the year, and would mitigate long-term project risks associated with delays.

4. Partner contributions: Upon endorsement of this plan, King County will have an integration plan that can be communicated and presented to other jurisdictions within King County and Washington State. In some cases – such as with municipal police – it is possible that other jurisdictions will benefit from the county's program. When appropriate, King County will approach those entities to discuss the mutual benefits of the program and the possibility of financial contributions from those jurisdictions.

5. Vendor sponsorship: Some software vendors sponsor incentive programs for government projects, or provide sizable rate incentives for government clients. Depending upon the solutions selected for this project, King County may qualify for financial incentives from the vendors. These incentives will either relieve certain project costs or reduce spending rates, allowing the county to extend previously allocated funds.

6. Private enterprise sponsorship: While it is unclear if such a funding approach has ever been attempted, it may be possible for the county to pursue program sponsor through a private enterprise. Such an endeavor may take several forms:

    - A private company may be willing to donate financial resources to the county in exchange for press coverage indicating their commitment to supporting public safety efforts in King County.
    - Similar to a public facility, a company may be willing to buy "naming rights" for the resulting criminal justice systems, provided the application user interface includes a commercial ad or logo.

6.3.4 Funding-Based Approaches for 2003

It is critical that this project not be mothballed for the balance of 2002 or 2003, as terminating the project would have negative impacts on the operational capabilities of the existing LSJ agencies. Therefore, based on the county's near-term financial condition, it is recommended that the project be funded a minimum of $1 million through 2003.

Based on the minimum recommended funding and other potential funding sources to be determined, the following represents budget-driven program alternatives for LSJ Integration from August 2002 to December 2003.

PROJECT APPROACHES FOR 2003			
Middleware Approach with Additional Funding			
Line Item	**Funding**	**Expense**	**Balance**
2002 initial balance for LSJ Integration	$ 218,000		$ 218,000
Planning Stage - January to August 2002		$ 64,000	$ 154,000
Additional Tech Bond Funding	$ 1,000,000		$ 1,154,000
Design Stage/Organization Phase - August to November 2002		$ 78,730	$ 1,075,270
Design Stage/Preparation Phase - October 2002 to March 2003		$ 159,649	$ 915,621
Design Stage/Design Phase - November 2002 to April 2003		$ 225,141	$ 690,480
Additional funding for integration	$ 1,000,000		$ 1,690,480
Middleware initial acquisition - April 2003		$ 110,000	$ 1,580,480
Implementation Stage/Development Phase - April to July 2003		$ 531,200	$ 1,049,280
Implementation Stage/Pilot Phase - July to December 2003		$ 1,024,600	$ 24,680

Integrated Application Approach with Additional Funding			
Line Item	**Funding**	**Expense**	**Balance**
2002 initial balance for LSJ Integration	$ 218,000		$ 218,000
Planning Stage - January to August 2002		$ 64,000	$ 154,000
Additional Tech Bond Funding	$ 1,000,000		$ 1,154,000
Design Stage/Organization Phase - August to November 2002		$ 78,730	$ 1,075,270
Design Stage/Preparation Phase - October 2002 to March 2003		$ 159,649	$ 915,621
Design Stage/Design Phase - November 2002 to April 2003		$ 225,141	$ 690,480
Additional funding for integration	$ 1,000,000		$ 1,690,480
Middleware initial acquisition - April 2003		$ 110,000	$ 1,580,480
Implementation Stage/Development Phase Middleware Install - April to July 2003		$ 292,625	$ 1,287,855
Implementation Stage/Base Application Install - July to December 2003		$ 1,193,125	$ 94,730

Approach with Minimum Funding			
Line Item	**Funding**	**Expense**	**Balance**
2002 initial balance for LSJ Integration	$ 218,000		$ 218,000
Planning Stage - January to August 2002		$ 64,000	$ 154,000
Additional Tech Bond Funding	$ 1,000,000		$ 1,154,000
Design Stage/Organization Phase - August to November 2002		$ 78,730	$ 1,075,270
Design Stage/Preparation Phase - October 2002 to April 2003		$ 159,649	$ 915,621
Design Stage/Design Phase - November 2002 to June 2003		$ 225,141	$ 690,480
Middleware initial acquisition - July 2003		$ 110,000	$ 580,480
Implementation Stage/Development Phase - August to December 2003		$ 531,200	$ 49,280

Table 8: Funding-Based Project Approaches for 2002-2003

Based on this analysis, ***the LSJ-I Program can accomplish meaningful results in 2003 at the minimum recommended funding level***. If the county is able to secure additional funding in the form of homeland security grants or additional budget appropriation, certain aspects of the project can be expedited in order to deliver additional results with tangible benefits in 2003.

6.4 ADDITIONAL AGENCY COMMITMENTS

In order to support the program given these financial resources, the LSJ agencies must provide project support and analyst resources to perform particular tasks. Based on the current program plan, agencies would need to allocate staff to support the project as follows in 2002 and 2003:

September 2002 to December 2003

- Adult and Juvenile Detention 1,312 hours
- District Court 1,312 hours
- Judicial Administration 1,312 hours

- Office of the Public Defender 880 hours
- Prosecuting Attorney's Office 1,312 hours
- Sheriff's Office 1,312 hours
- Superior Court 1,312 hours

These hours do **NOT** represent specific individuals or dedicated blocks to time. Given the skills and requirements of the project, it is likely that these hours represent the participation of four to five different employees from each agency over the course of 16 months. Individuals will not be reassigned to the program office or removed from their existing roles for extended periods of time.

7.0 PROGRAM PLAN AND APPROACH

KEY FACTS AND FINDINGS

- King County should establish a Program Office to perform LSJ integration, with initial efforts focused on operation modeling and requirements analysis.
- The most significant risk to LSJ integration is the inability to continue to fund the program in 2004 and 2005.

As previously stated in **Section 5.4, Recommended Implementation Approach**, in order to manage LSJ integration it is recommended that the county establish a long-term Program Office. This Program Office will be charged with the following responsibilities:

- Coordinate and oversee the strategy development and planning for deploying integration technology to support the LSJ community.
- Define and manage specific integration projects within the LSJ integration strategy.
- Align the inter-agency integration effort with agency specific technology strategies and projects, and as appropriate coordinate implementation of such projects with the LSJ-I Program.
- Develop budget requirements for the LSJ-I Program, and organize the inter-agency pursuit of funding to support the program.
- Report LSJ-I Program progress to all interested parties, including but not limited to the King County Executive, elected officials within the LSJ community, the King County Council, the Strategic Advisory Council, the Business Management Council, the LSJ BMC Sub-Committee, the Project Review Board, the Business Sponsor, and the Chief Information Officer of the county.
- Represent the LSJ-I Program and the integration interests of King County to other interested organizations and governments, including but not limited to the State of Washington, municipal jurisdictions within the King County, and other counties.

This Program Office, therefore, will be established as a defined entity, overseeing multiple projects. At a minimum, it will manage the initial projects identified to support this plan, currently extending through September 2005.

7.1 WORK PLAN

7.1.1 Plan Summary

The current work plan for the LSJ-I Program models the scope of the effort, estimates resource and staff requirements, and presents the estimated timing. The work plan was developed as follows:

- Following program endorsement and funding, the county will perform a "Phase I." Phase I will accomplish four major objectives:
    - Establish the charter, structure, procedures, and staffing of the Program Office.
    - Define the detailed attributes of the criminal justice workflow, data flow, and operational models within King County.
    - As applicable, refine priorities and identify potential "quick-win" projects that may represent very simple information sharing opportunities that can be immediately implemented with immediate payback.
    - Based on the detailed analysis, determine the technical solution alternative to be pursued, develop the solution requirements, and perform the vendor selection.
- Phase II involves the acquisition and initial deployment of the selected technical solution. Regardless of the solution (middleware or integrated application), this will involve the introduction of the solution into the county infrastructure in order to establish the basic "plumbing" for performing the incremental integration projects. The county would begin realizing some benefits associated with a prototype project and other "quick-win" opportunities.

- Phase III involves incremental sub-projects. In the case of a middleware solution, this will involve development the data sharing solutions that support specific operational improvements. In the case of an integrated application, this will involve the customization and deployment of application modules.

Appendix E reviews the business opportunities resulting from the previous analysis efforts, and how those opportunities are organized as incremental projects for implementation.

7.1.2 Milestones and Decision Points

The program approach as described allows the county to achieve defined milestones, review the program performance, and re-evaluate direction and funding. This allows the county to make later decisions regarding priorities, spending rates, and timing, in order to adjust to changing operational and financial conditions while still allowing the effort to proceed in a meaningful and beneficial manner.

Based on the current plan, the following are key milestones for the program:

Milestone	Date	Decision	Spending Program-to-Date
Program Initiation	8/22/02	Endorse LSJ-I	$64,000
Solution requirements	12/02	Proceed to 2003	$200,000
Vendor/solution selection; Comprehensive integration models	2/03	Proceed with solution contracting	$285,000
Final implementation plan	4/03	Go/No Go for Phase II	$365,000
Initial deployment (middleware)	7/03	Proceed to pilot prototype	$935,000
Pilot/Prototype	12/03	Go/No Go for Phase III incremental projects	$1,215,000

Table 9: Milestones and Decision Points for 2002-2003

7.2 PROGRAM MANAGEMENT AND GOVERNANCE

The Program Office will be lead by a Program Manager. The Program Manager will have three distinct reporting responsibilities:

1. For personnel and performance management purposes, the Program Manager will report to the Office of Information Resource Management. The actual reporting relationship will either be to the Application Portfolio Manager or to the Chief Information Officer, to be determined.

2. For program steering committee guidance, the Program Manager will report to the LSJ BMC Sub-Committee. Since this committee is a sanctioned sub-committee of the BMC, this is also the method by which this project will report status to the BMC, and the group that will advice the CIO regarding program issues and technology decisions.

3. For issue management, escalation, and senior-level policy decisions, the Program Manager will report to the Business Sponsor. The Business Sponsor will coordinate resolution of any interagency conflicts, and will provide senior representation of the program to any councils or committees as necessary.

Initially, the Program Office will include four additional roles. These four roles may **not** require four full-time staff, depending on the program funding and therefore the speed and aggressiveness for executing the integration program. Some of the responsibilities may be shared by the Program Office members. Briefly, the roles and responsibilities for these positions is as follows:

- Operations Project Manager: During Phase I, this person would manage the development of the detailed operational and workflow models, contribute to the development of solution requirements, and contribute to the development of

other program deliverables. This project manager would transition to be one of the implementation project managers during later phases of the project.

- Data Project Manager: During Phase I, this person would manage the development of the detailed data flow and data modeling efforts, contribute to the development of solution requirements, and contribute to the development of other program deliverables. This project manager would transition to be one of the implementation project managers during later phases of the project.

- Quality Control/IV&V Consultant: During Phase I, this would be a part-time resource who would advice the county regarding its approach to LSJ integration. Due to the nature of the position, this would be a consultant with experience defining integration requirements and strategy, ideally within a justice community.

- Project Administrator: This person would coordinate the administrative, communications, and reporting activities of the LSJ-I Program. During Phase I, this effort may be limited and therefore be performed by the Program Manager and Project Managers. Later, when the program will be coordinating multiple projects, communication and reporting will be more involved.

See Appendix F for Program Office organization charts graphically demonstrating the structure of the Program Office, governance, and project team composition.

7.3 PROGRESS AND REPORTING

Program reporting will be defined when the program charter is developed. However, at the very least the Program Office will initially report the following monthly to the LSJ BMC Sub-Committee:

- Status and progress against known milestones
- Budget and spending rates
- Issues and scope change requests

During later stages of the effort, the Program Office will report appropriate tangible and intangible metrics based on the phased implementation of projects and the expected business benefits of those projects. Such metrics may include:

- Known time savings of operations
- Dollar savings
- Changes in case disposition and processing timing
- Changes in inmate detention days
- External jurisdiction participation
- Customer and partner satisfaction
- Web site hit rates

7.4 COMMUNICATIONS PLAN

Separate from the reporting and communications requirements within the program, the county must also communicate with external parties regarding the LSJ-I Program. Due to the current work plan and the timing of implementation efforts, a full communications plan has not been developed at this time. There are four areas that will be addressed in the future communications plan:

1. Third party coordination: At this time, the Program Office will be chartered with coordinating and communicating with third parties. These include municipal jurisdictions within King County, and the State of Washington. As the communications with these parties is engaged, the Program Manager will assess the need for a formal "communications and awareness program". Such a communications effort will not only inform these partners about the county's efforts, but will solicit their participation.

2. End-user training: Every integration solution will require some level of user training. Training is included within the current plan, with activities associated with the incremental projects in Phase III.

3. Press and public relations: There is sensitivity regarding issues directly impacting public safety. It is unclear how the nature of this project will be reported by the press and interpreted by the public. It could be a very positive public relations opportunity ("Here is what King County is doing to protect our citizens"), or it could be viewed as an all-too-late response to an existing gap in public safety. When this project becomes public – an event that is likely to occur during the 2004 budget cycle – it will be important to have a clear strategy for public relations and interacting with the press.

4. Marketing: Some aspects of this program involve the development of new public services. These services will require advertising and marketing in order to maximize their use and thereby maximize their benefit.

7.5 RISK MANAGEMENT

The LSJ-I Program is a large effort that will cost several million dollars over three to four years. As with any technology project of this scope and magnitude, there are risks associated with it.

Risk #1: The project fails due to factors related to management or politics within the county.

The Program Office structure recommended by this plan ensures a high level of visibility of both the Program Manager and of the LSJ-I Program in general. The Program Manager is required to report status to a cross-agency steering committee, which would be able to collectively or individually voice concern regarding the program to the CIO, Business Sponsor, or their superiors. Likewise, the Program Manager would have at least two different paths of management escalation

available, either to the Business Sponsor (who will likely be an elected official) or to the CIO who reports to the County Executive.

Risk #2: Controlled delays caused by funding constraints will alter the cost/benefit model of the project.

With a Program Office establishing strategic unity for the program, controlled delays should result in minimal costs other than extending the life of the Program Office itself. Delays would cause subsequent delays in the realization of tangible benefits, which would impact the 10-year benefit calculation but should not impact cost reduction run-rates.

Risk #3: The LSJ-I Program Office cannot be funded in the out years of 2004-2005.

The most serious risk to the overall viability of the LSJ-I Program is the inability to sustain the Program Office. If the Program Office is shut down, the county will lose its unified strategy and management of LSJ-related integration projects. The likely result is that the LSJ integration effort becomes a series of tactical, loosely affiliated efforts to move data using the middleware infrastructure that is implemented in 2003. At best, such efforts would have varying degrees of unmeasured success. At worst, such efforts will fail, the investment in the integration middleware will be wasted, county costs will increase as it becomes reactionary to state and federal mandates, improvements will be stagnant, and the LSJ-I program will be re-initiated from scratch when funding becomes available.

It is critical that the county immediately begin assessing the future financial commitments for this effort. The Program Office will coordinate the pursuit of grants and external resources as previously stated, and pursuing such funding may mitigate this risk.

Risk #4: The existing application infrastructure supporting the LSJ community will fail or require extensive maintenance efforts concurrent to the integration project.

Due to the current state of the application portfolio, the requirements of the operations, and the status of the maintenance staff, there is a very real possibility that the existing infrastructure will require replacement concurrent to this project. This is consistent with the GartnerGroup's analysis of integration technology trends.

To address this risk, this project has retained as part of its alternatives the possibility of acquiring an integrated application suite. This alternative will be considered in light of both the integration requirements of the county, and the ongoing viability of the legacy application suite supporting the LSJ community.

Risk #5: Upon implementation, the project falls short of achieving its estimated tangible benefits.

Tangible benefits were conservatively estimated based on reasonable rates, and weighted to assume only an 80 percent realization of the expected benefits. As a result, the cost/benefit analysis resulted in an adequate return on investment that provides a $5-10 million margin (depending on solution) before the project fails to pay for itself over the 10-year model. Tangible benefits will be monitored and reported by the Program Office.

Risk #6: Regional stakeholders may not wish to cooperate with King County.

As the county discusses the project with other jurisdictions, those stakeholders may not wish to participate with the county for some reason (political, technical, etc.). Many of the benefits for the county are fully realized only with the cooperation and participation of other jurisdictions. In order to address this risk, the applicable King County officials will participate in the communications activities with the jurisdictions, influencing their support and participation as necessary.

Risk #7: Regional stakeholders may seek to influence the county's strategy.

As the county discusses the project with other jurisdictions, those that wish to interconnect with the county may impose technical requirements or otherwise wish to alter the county strategy. To mitigate this, as stated the county will adopt state standards related to data elements and exchange models. Otherwise, the county will remain flexible to changes to its strategic direction, and the Program Office will be able to evaluate requests from partners that make sense from the perspective of public safety and efficiency.

Risk #8: Federal or state laws may require the county to expedite various aspects of the project.

Again, the county will remain flexible to changes to its strategic direction. In the event state or federal laws involving data sharing impact the county, the Program Office will review sub-project activities and be prepared to alter scope or timing in order to accommodate such business requirements. The Program Office will also monitor costs associated with such changes for the purpose of discussing relief and assistance from the appropriate source.

Risk #9: External pressures may cause the county to alter the project scope or strategy.

It is possible that some event may place pressure upon the county to alter or change the priorities and scope of this program. Based on case studies and reports from other jurisdictions in the U.S., it is possible that such an even may involve the death of a police officer or a violent crime that is the direct result of the county mismanaging a criminal suspect due to the inability to access pertinent information.

Again, the county will remain flexible to changes to its strategic direction. In the event such an event impacts the county, the Program Office will review sub-project

activities and be prepared to alter scope or timing in order to accommodate such business requirements.

Risk #10: Individual agencies within King County may decide on divergent integration efforts.

It is possible that specific LSJ agencies or departments within King County may decide to pursue stand-alone integration initiatives, including the independent procurement of funding. This may be caused by disagreement over priorities and timing, concern over project direction, political ideology, or an immediate and isolated opportunity that presents itself to one agency.

The program governance is structured in a manner that creates a forum for open discussion regarding conflicts and concerns. Since the LSJ agencies will mutually participate in the governance, they all have the opportunity to voice issues and influence project priorities and schedules. Additionally, the role of the Business Sponsor will be to reconcile conflicts. Ultimately, since the CIO, Business Sponsor, and all elected officials overseeing LSJ agencies are members of the Strategic Advisory Council, there is a common forum for discussing such issues.

8.0 ISSUES AND ALTERNATIVES

KEY FACTS AND FINDINGS

- LSJ integration will likely impel the county to examine other issues, such as wireless networks, regionalized services, and the future of mainframe computing.
- Various alternatives related to project management and technical operations have been assessed.

As with any major program, there are alternative opinions regarding the methods and approach for performing a project, and issues that will affect the enterprise after implementation. Those issues and alternatives have been considered. In some cases, alternatives have been analyzed and discarded in favor of the approach documented in this report. Business impacts have been considered, and are either deemed to be issues or risks to be mitigated during implementation, or are considered acceptable (or even desirable) outcomes of the program.

8.1 OTHER TANGENTIAL ISSUES

In addition to impacts to LSJ-related operations directly resulting from the project, there are tangential impacts to non-LSJ operations and general county technology. These items are currently external to the scope of the LSJ-I Program, but should remain under consideration.

8.1.1 Wireless Networks

Implicit to the objective of improving data availability to decisions makers is the ability to access that data. Therefore, it is very likely that this project will become a driving factor for two separate wireless initiatives:

1. A wide area network supporting the Sheriff and police, to support the ability to access data and information from mobile units without tying up radio communications

2. Local area networks within the King County Courthouse, Downtown Seattle Jail, and Regional Justice Center, to allow judges, deputy prosecuting attorneys, public defenders, and defense council to access electronic case documents and paperless case files from anywhere within the respective buildings, and to support the exchange of information between police and other agencies

8.1.2 Mainframe Management

The two major systems running on the county mainframe are the LSJ applications, and the county financial management applications. If either of these application groups migrates off the mainframe, it becomes costly for all other clients to use the mainframe. Therefore, if the LSJ agencies commit to the mainframe, it implicitly requires a similar commitment from the county that future financial systems will be mainframe based. If the LSJ agencies decide to implement a non-mainframe based integrated application suite, it implicitly requires the rest of the county to examine a broader mainframe migration effort.

8.1.3 ITS/ADSS Operations

It appears that the ITS support model for the LSJ agencies will change as a result of this project. This change is not as simple as managing new or different middleware and application infrastructure. It also involves changes in skill sets in order to support new and emerging technology standards that the agencies adopt. The ADSS unit of ITS must be prepared to respond to these requirements.

8.1.4 Regional Influence

Due to the nature and goals of this program, this effort further entrenches King County as a regional provider of justice services. Such a position could have long-range implications for the county, with incumbent cost (e.g., continued increase in jail and prosecutor load) and/or potential revenue (e.g., improved business justification for contract sheriff services).

8.2 PROGRAM MANAGEMENT ALTERNATIVES

There are several alternatives to the program management approach and program structure recommended in this business plan. Generally, alternatives would involve a change in the size, scope, and responsibility of the Program Office. Various alternatives with their advantages and disadvantages are briefly outlined below.

1. Expanded Program Office – Create a self-sufficient Program Office or "Integration Unit" and charge it with complete execution of all aspects of the integration effort. Ensure that staffing is adequate to perform all aspects of the project independent of the LSJ agencies and ITS, without any need to borrow staff.

   Pros:

   - Provide unbiased analysis operations and implement best practices.
   - Ability to mandate operational and technical changes.
   - Utilize consultants with direct experience for all project aspects.
   - Eliminate possible delays associated with resource constraints.
   - Isolate all project costs for proper capitalization.
   - Reduce ancillary support required of LSJ agencies.

   Cons:

   - Very substantial increased costs.
   - Decreased ability to leverage existing operational knowledge.
   - Increased potential to misalign solution with business.

   Reason for discarding alternative: For some enterprises this may be the ideal scenario, but for the county this approach is a) contrary to the culture of the county, and b) cost prohibitive given the current financial projections, budget constraints, and funding options.

2. Decreased Program Responsibility – Charter the Program Office to simply coordinate inter-agency issues and communications while all agencies pursue independent but interrelated integration projects.

   Pros:

   - Reduced Program Office costs.
   - Expedited implementation of certain projects.

   Cons:

   - Increased overall costs associated with redundant projects.
   - Loss of overall county strategy and direction.
   - Inability to gain efficiency of scale for solution sets.
   - Inability to monitor financial and operational results.
   - Alienation of agencies that cannot stand alone to fund projects, creating a "weak link" scenario.

   Reason for discarding alternative: Likely result is an incomplete solution supporting a subset of the criminal justice operation, with increased overall costs and unknown tangible payback.

3. Eliminate the Program Office – Charter the LSJ BMC Sub-Committee with responsibility for the program.

   Pros:

   - Reduced costs.
   - More direct control of project by agencies.

   Cons:

   - Elimination of program management and integration experience.
   - Increased program risks as discussed in Section 7.5.
   - Likely results in either the Program Office responsibilities not being performed, or
   - The LSJ BMC Sub-Committee creating an ad hoc structure that replicates the planned Program Office but without the effectiveness and organization.

   Reason for discarding alternative: Risk and scenario assessment result in a conclusion that this alternative could not reasonably advance the project forward or succeed in delivering on the business objectives.

8.3 TECHNOLOGY ALTERNATIVES

Issues related to technology alternatives were addressed in detail in the Technology Strategy Report. In summary, there are three technology alternatives to the options being considered by the LSJ-I Program.

1. Proprietary Integration

   Pros:

   - No initial technology investment required.
   - Integration could be achieved using the existing skills of the existing staff.

- No introduction of new infrastructure to the existing IT operation.

Cons:

- Results in a very complex environment.
- Does not support reuse of integration logic.
- Increases maintenance responsibilities and costs.
- Tightly couples infrastructure, creating difficulty for future replacement.
- Does not establish external integration capabilities.

2. Best-of-Breed Tool Acquisition

   Pros:

   - Results in complete best-of-breed "toolkit".
   - Consistent with current county practices.

   Cons:

   - Substantial additional product acquisition costs.
   - Questionable value for comprehensive toolkit given requirements.
   - Redundant capabilities of tools.
   - Complexity for resulting solution toolkit.
   - May not establish open standard for external integration.

3. In-House Application Redevelopment

   Pros:

   - Best resulting alignment to end-user needs.
   - Incremental development.
   - Simplification of prioritization and scheduling.

   Cons:

   - Very expensive total cost.
   - Very prolonged project lifecycle.
   - Failure to adopt industry best practices.

9.0 REQUIRED ACTION

In order to advance the LSJ-I Program, several activities are required during the next 90 days. This section outlines the understanding of the endorsement requirement for this program, and the activities that will be performed subsequent to that approval.

KEY FACTS AND FINDINGS
• LSJ integration requires SAC endorsement as part of the technology governance and budget process.

9.1 ENDORSEMENT REQUIREMENTS

In order to proceed, the LSJ-I Program requires the endorsement of the Strategic Advisory Council (SAC) as part of the technology governance and budget process. This endorsement states the following:

- The SAC supports the stated goals and objectives of the county related to LSJ integration, specifically the desire to improve public safety, eliminate redundant operations, and reduce costs through the improved sharing of information.
- The SAC agrees with the recommendations and business case for this program as outlined in this plan.
- The SAC endorses the allocation of $1 million to support the 2002-2003 Program Office for LSJ integration.
- The elected officials from the LSJ agencies support this business plan, and agree to support the ongoing program.

Appendix H is a one-page endorsement to be signed by the SAC membership.

9.2 IMMEDIATE NEXT STEPS

Upon program approval, the CIO, LSJ BMC Sub-Committee, and the Program Manager will perform the following activities during the next 30 days:

- Hire a Program Manager for the LSJ-I Program.
- Develop additional information required to incorporate the program in the 2003 Technology Business Plan, and allocate money in the 2003 budget.
- Document the Program Office Charter.
- Initiate the search to fill other positions within the Program Office.
- Develop and document communication and reporting standards, control procedures, roles and responsibilities, and administration guidelines for the program.

9.3 SHORT-TERM ACTIVITIES

Within 90 days after program definition, the Program Office will perform the following additional activities:

- Officially name a Business Sponsor.
- Develop a comprehensive workflow model for criminal cases.
- Initiated analysis of integrated workflow modeling.
- Initiated analysis of comprehensive data flow modeling.
- Develop detail solution requirements.
- Create and distribute an RFP to vendors for solution proposals.
- Initiated communications with external organizations and jurisdictions about the county's program.

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APPENDIX A: PROJECT REFERENCE DOCUMENTS

The major deliverables for the Planning Stage of the LSJ Integration Project are located on the project web sites:

- Internet – http://www.metrokc.gov/oirm/projects/lsj.htm
- Intranet – http://kcweb.metrokc.gov/oirm/projects/lsj.htm

Project documents include the following:

- Technology Strategy Report: This report documents various technical alternatives for achieving the goals of LSJ integration. The report examines the alternatives, aligns those alternatives to the business goals of the project, identifies three primary options, and provides explanations and recommendations related to those options.
  - http://www.metrokc.gov/oirm/projects/1-3-4%20technology%20strategy%20report.pdf

- Opportunities Analysis Report: This report identifies both quantitative and qualitative business opportunities related to LSJ integration, defines and explains those opportunities, and when applicable documents the benefits associated with the opportunities.
  - http://www.metrokc.gov/oirm/projects/1-2-7%20business%20opportunities%20analysis%20report.pdf

- Initial Assessment Report: This report identifies the initial issues and recommendations related to LSJ integration. The report includes an analysis of industry best practices, various related concepts regarding integration in general, and 10 specific findings to be used as guiding principles for the integration effort.
  - http://www.metrokc.gov/oirm/projects/1-1-7%20opportunities%20assessment%20report.pdf

Secondary project documents available online include the following:

- Preliminary Scope Document, created October 2001
- Initial Examination Report, created November 2001
- LSJ BMC Sub-Committee Charter
- Vendor Guidance Document
- Various presentations given throughout the Planning Stage
- Planning Stage Project Plan

Other Reference Documents

In addition to the LSJ integration project documents, several other source documents contributed information to this report:

- The 2002 King County Strategic Technology Plan, published in May 2002

- The Adult Justice Operations Master Plan, published in various reports from October 2001 to May 2002, and transmitted in a final report in May 2002

- Various City of Seattle SeaJIS project shared reports and documents, and their web site at http://www.ci.seattle.wa.us/courts/cjis/default.html

- Various Washington State JIN project shared reports and documents, and their web site at http://www.wa.gov/dis/jin/

- Research materials from the Office of Justice Programs, and division of the U.S. Department of Justice, at http://www.it.ojp.gov/index.jsp

APPENDIX B: JUSTICE INTEGRATION PRINCIPLES AND PREMISES

LSJ integration, as described in this plan, is the result of several premises, principles, and assumptions. Some of these involve industry trends or other outside factors, some involve the original implicit and explicit goals for the project, and some involve analytical findings resulting from efforts both within and prior to this planning effort.

PREMISE OF INTEGRATION

Since 1997, integration has emerged as the principal advancement in the justice industry. This trend has been driven by several factors:

- As technical capabilities emerge, law enforcement and justice entities have realized the capabilities resulting from improved information sharing.
- Recently legislative mandates have required the improved sharing of criminal activity to support such diverse issues as employment, licensing, and handgun purchase screening.
- Shifts in community based police programs have heightened public awareness of and desire for criminal information, as well as exposed the limitations of existing operations and systems.

The GartnerGroup, Giga Information Group, and other industry analyst organizations have performed ongoing research of the technology trends of the integration industry. In February 2001, GartnerGroup published a commentary on some of the general issues facing integration projects. In no particular order, those issues are as follows:

- Most integration efforts are inhibited by inadequate infrastructure, and the need to simultaneously manage, modify, and replace that infrastructure.
- Data consistency is often the major business driver for integration projects, yet the propagation of data changes between applications is often misunderstood.
- Developers within all IT organizations need to include data exchange capabilities in the design of applications, even if those applications are not initially intended to exchange data.
- New application requirements are often achieved by assembling and reusing existing applications, rather than building new applications.
- The trend is that an integration project actually accelerates the obsolescence of legacy systems, rather than extending their life.

- Integration efforts require good management, and an unmanaged effort injects more business risk into an operation than not attempting to integrate does.

PRINCIPLES OF INFORMATION AND DATA MANAGEMENT

Within the context of justice integration, the sharing and management of data and information is paramount. The benefits and advantages of justice integration are all derived from the ability of decision makers to access information without the need to redundantly capture and store data.

In 1997, the National Task Force on Court Automation and Integration was organized to assess the Court Information Systems Technical Assistance Project – a project under the Office of Justice Programs of the U.S. Department of Justice. In 1999, that task force defined integration as follows:

> Integration of justice information systems is best defined as the electronic sharing of information by two or more distinct justice entities within a system. The degree to which information systems are considered "integrated" depends on who participates, what information is shared or exchanged, and how data are shared or exchanged within the system.

It is interesting to note the following items pertaining to this definition:

- The definition avoids any qualification of integration based on the connectivity or performance of multiple IT systems, but instead leaves the definition as a sharing of information/data.

- The definition specifically allows for qualitative variations of integration within a justice system.

In April 2000, SEARCH, The National Consortium for Justice Information and Statistics, published a report called Integration in the Context of Justice Information Systems: A Common Understanding as part of a project sponsored by the Bureau of Justice Assistance. This report defines integration, and the goals of a judicial integration effort, in the following terms:

- Integration encompasses a variety of functions designed to enable the timely and efficient sharing of information within and between agencies.

- The primary objective of integration is the elimination of duplicate data entry, access to information that is not otherwise available, and the timely sharing of critical data.

Based on these industry definitions and other relevant best practices, King County has adopted a premise maintaining a data-centric definition of justice integration. Therefore, the project objectives will be primarily accomplished by addressing data-centric initiatives.

PRINCIPLES OF HORIZONTAL AND VERTICAL INTEGRATION

Vertical and horizontal integration within the context of criminal justice relates to the relationships between the agencies involved in integrating information. "Horizontal" integration is defined as information exchanged between agencies within a single justice community or operation (for example, integration between the King County Sheriff and the King County Prosecutor's Office). "Vertical" integration is defined as information exchanged between functional organizations at different levels of the justice industry (for example, integration between the Seattle Police, King County Sheriff, and Washington State Patrol).

The following demonstrates graphically how the concept applies to King County.

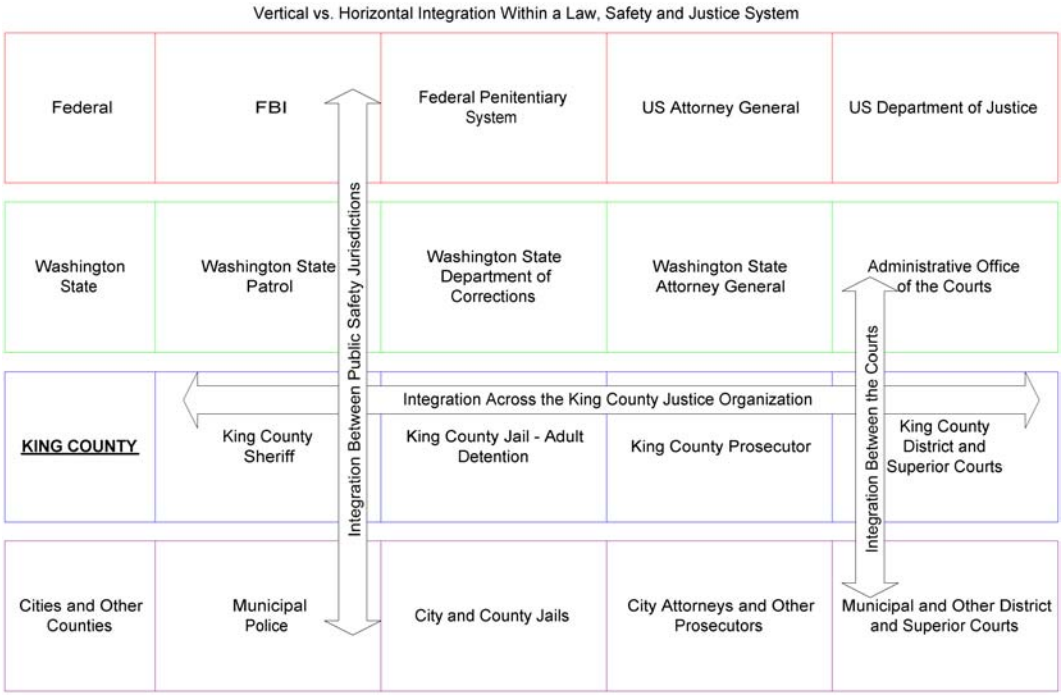

Figure 4: Vertical vs. Horizontal Integration

Applying the premise to King County's business objectives, the goal is to share information both vertically and horizontally within the collective criminal justice and public safety enterprise. This involves sharing information and accessing data with both external agencies as well as within the county's LSJ community.

Based on the current workflow and unintegrated communications, the following demonstrates the vertical and horizontal integration requirements for the project.

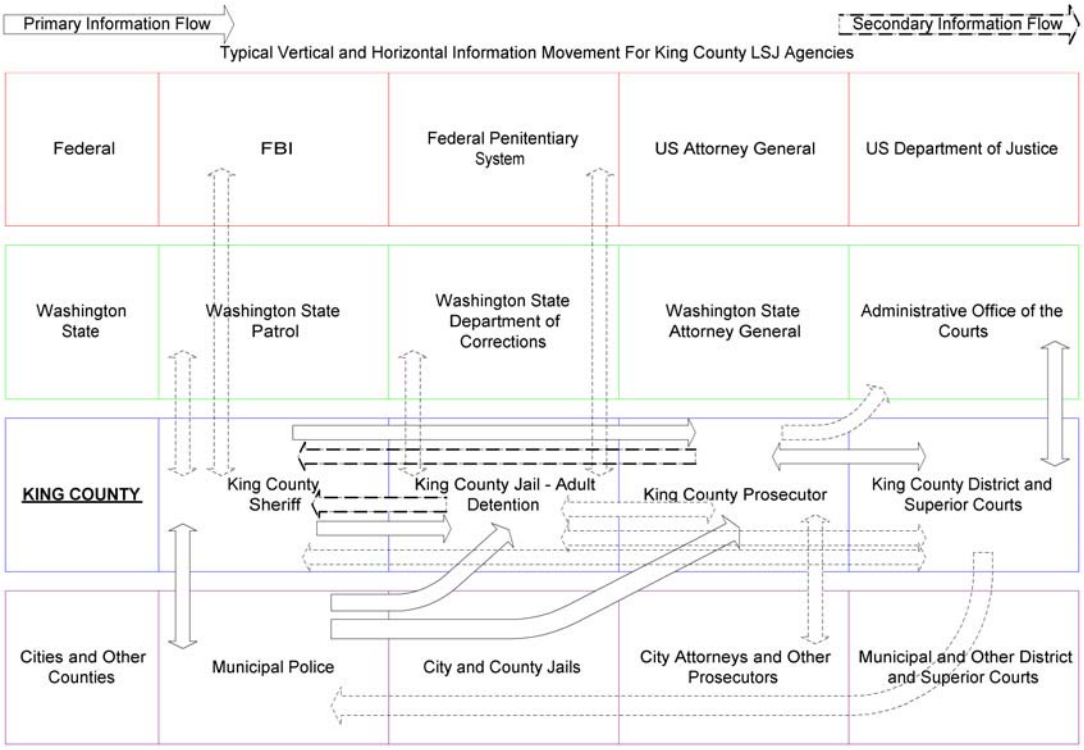

Figure 5: King County-Centric View of Vertical and Horizontal Integration

PREMISE OF DATA EXCHANGE AND WORKFLOW

It is assumed that the eventual integration solution will not only decrease data-related workload, but also create opportunities for improving or reengineering operations. Much of the LSJ workflow is driven by the handoff of data from one agency or operation to the next. However, these communications follow a core workflow model that is rigid and does not support dynamic data access. It is not easy for an agency to inject an ad hoc information request into the workflow without disrupting operations.

Industry best practices include the following concepts regarding how data is exchanged in a manner that both supports a core criminal case workflow, and allows for dynamic access and operational improvements:

- Foundation principles
    - Data should be captured at the originating point.
    - Data should be captured once and used many times.
    - Integrated systems should be driven by the operational activities, not separate.
    - General capabilities of the solution should be constructed as global capabilities.

- Every exchange has four elements
    - The **event** that triggers the exchange
    - The **agencies** involved
    - The **information** to be exchanged
    - The **conditions** that define and impact the exchange
- Every exchange has three components
    - The **content** (data)
    - The **context** (overlying business operation)
    - The **protocol** (rules and language)
- For every exchange, there are five methods for achieving the transaction:
    - **Query** an information source
    - **Push** information to a recipient downstream agency
    - **Pull** information from an upstream agency
    - **Publish** information for general ad hoc access
    - **Subscribe** to an information source

It is critical that every exchange is performed following one method, and is defined based on all four elements and all three components.

APPENDIX C: COST/BENEFIT ANALYSIS SPREADSHEETS FOR MIDDLEWARE INTEGRATION

Form 2/ Project Costs by Year **Project** LSJ-I Program

16-May-02

PROJECT COSTS	Account Codes	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	LIFETIME TOTAL
Salaries and Wages	51110	335,018	1,065,958	2,452,260	749,340	0	4,602,576
Employee Benefits	51xxx	83,755	266,490	613,065	187,335	0	1,150,644
Supplies	52110	2,600	2,600	2,600	2,600	0	10,400
EDP Supplies	52212	0	0	0	0	0	0
Consulting IT Services	53127	0	1,227,510	1,928,550	557,750	0	3,713,810
Subcontract IT Services	53179	0	0	0	0	0	0
Travel	53310	0	5,000	5,000	5,000	0	15,000
Printing	53806	1,200	1,200	1,200	1,200	0	4,800
Training-IT	53813	0	10,000	5,000	10,000	0	25,000
IT - Internal Service	55xxx	10,000	10,000	5,000	10,000	0	35,000
Hardware/Software	56740	20,000	876,000	700,000	100,000	0	1,696,000
Communication Equipment	56780	0	0	0	0	0	0
Capital IT Lease - Principal	57303	0	0	0	0	0	0
Capital IT Lease - Interest	57304	0	0	0	0	0	0
Private Auto Mileage	53318	400	1,000	1,000	400	0	2,800
Telcom Serv-Ongoing Chrg	53211	600	1,200	1,200	700	0	3,700
Other (specify)		0	0	0	0	0	0
Other (specify)		0	0	0	0	0	0
TOTAL COST		453,573	3,466,958	5,714,875	1,624,325	0	11,259,730

Note: See Instructions tab for other pertinent accounts that could be added to this list.

Table 10: Program Costs by Year (Middleware Integration)

Form 5/ Benefits Cash Flow Analysis **Project** LSJ-I Program

16-May-02

		BENEFITS										
TANGIBLE BENEFITS	Accounts	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	TOTAL
Hard $												
Revenues (specify)	(account codes)	0	0	0	0	0	0	0	0	0	0	0
												0
												0
												0
												0
Reimbursements (specify)	(account codes)	0	0	0	0	0	0	0	0	0	0	0
												0
												0
												0
												0
Cost Reduction (specify) (1)	(account codes)	0	0	973,404	2,603,604	2,740,104	2,740,104	2,740,104	2,740,104	2,740,104	2,740,104	20,017,632
Salaries and Wages	51110											0
												0
												0
												0
												0
Other (specify)	(account codes)	0	0	0	0	0	0	0	0	0	0	0
												0
												0
												0
												0
Soft $												0
Cost Avoidance (specify)	(account codes)	0	0	0	0	0	0	0	0	0	0	0
												0
												0
												0
												0
Other (specify)	(account codes)	0	0	0	0	0	0	0	0	0	0	0
												0
												0
												0
												0
TOTAL INFLOWS		0	0	973,404	2,603,604	2,740,104	2,740,104	2,740,104	2,740,104	2,740,104	2,740,104	20,017,632
CUMULATIVE BENEFITS			0	973,404	3,577,008	6,317,112	9,057,216	11,797,320	14,537,424	17,277,528	20,017,632	

(1) Reflect all Cost Reduction Benefits except Operations reductions (which are reflected in Cost of Operations).
(2) Total Inflows carries to Form1

Table 11: Benefits Cash Flow Analysis (Middleware Integration)

Form 4/ Current versus Proposed Method Operations Costs **Project** LSJ-I Program

16-May-02

		FY 2002			FY 2003			FY 2004			FY 2005			FY 2006		
OPERATIONS COSTS	Accounts	(a) Current	(b) Project	(c) = (b)-(a) Incremental Effect of Project (to summary)	(a) Current	(b) Project	(c) = (b)-(a) Incremental Effect of Project (to summary)	(a) Current	(b) Project	(c) = (b)-(a) Incremental Effect of Project (to summary)	(a) Current	(b) Project	(c) = (b)-(a) Incremental Effect of Project (to summary)	(a) Current	(b) Project	(c) = (b)-(a) Incremental Effect of Project (to summary)
Salaries and Wages	51110	6,489,157	6,489,157	0	6,813,615	6,813,615	0	7,154,296	7,154,296	0	7,512,010	7,512,010	0	7,887,611	7,887,611	0
Employee Benefits	51xxx	1,921,717	1,921,717	0	2,017,803	2,017,803	0	2,118,693	2,118,693	0	2,224,628	2,224,628	0	2,335,859	2,335,859	0
Supplies	52110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDP Supplies	52212	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consulting IT Services	53127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcontract IT Services	53179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Travel	53310	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Printing	53806	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Training-IT	53813	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IT - Internal Service	55xxx	5,341,601	5,341,601	0	5,341,601	5,341,601	0	5,875,761	5,875,761	0	5,875,761	6,013,261	137,500	6,463,337	6,765,837	302,500
Hardware/Software	56740	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Communication Equipment	56780	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Capital IT Lease - Principal	57303	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Capital IT Lease - Interest	57304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL OPERATION COSTS		13,752,475	13,752,475	0	14,173,019	14,173,019	0	15,148,750	15,148,750	0	15,612,399	15,749,899	137,500	16,686,807	16,989,307	302,500
FTE'S				0			0			0			0			0

		FY 2007			FY 2008			FY 2009			FY 2010			FY 2011		
OPERATIONS COSTS	Accounts	(a) Current	(b) Project	(c) = (b)-(a) Incremental Effect of Project (to summary)	(a) Current	(b) Project	(c) = (b)-(a) Incremental Effect of Project (to summary)	(a) Current	(b) Project	(c) = (b)-(a) Incremental Effect of Project (to summary)	(a) Current	(b) Project	(c) = (b)-(a) Incremental Effect of Project (to summary)	(a) Current	(b) Project	(c) = (b)-(a) Incremental Effect of Project (to summary)
Salaries and Wages	51110	8,281,991	8,281,991	0	8,696,091	8,696,091	0	9,130,896	9,130,896	0	9,587,440	9,587,440	0	10,066,812	10,066,812	0
Employee Benefits	51xxx	2,452,652	2,452,652	0	2,575,285	2,575,285	0	2,704,049	2,704,049	0	2,839,251	2,839,251	0	2,981,214	2,981,214	0
Supplies	52110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDP Supplies	52212	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consulting IT Services	53127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcontract IT Services	53179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Travel	53310	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Printing	53806	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Training-IT	53813	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IT - Internal Service	55xxx	6,463,337	6,765,837	302,500	7,109,671	7,442,421	332,750	7,109,671	7,442,421	332,750	7,820,638	8,186,663	366,025	7,820,638	8,186,663	366,025
Hardware/Software	56740	0	250,000	250,000	0	200,000	200,000	0	250,000	250,000	0	0	0	0	450,000	450,000
Communication Equipment	56780	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Capital IT Lease - Principal	57303	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Capital IT Lease - Interest	57304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL OPERATION COSTS		17,197,981	17,750,481	552,500	18,381,047	18,913,797	532,750	18,944,615	19,527,365	582,750	20,247,330	20,613,355	366,025	20,868,664	21,684,689	816,025
FTE'S				0			0			0			0			0

(1) FY__ Column (c) for each Cost Code carried to Form3

Note: See Instructions tab for other pertinent accounts that could be added to this list.

Table 12: Current vs. Proposed IT Operational Costs (Middleware Integration)

APPENDIX D: COST/BENEFIT ANALYSIS SPREADSHEETS FOR INTEGRATED APPLICATION DEPLOYMENT

Form 2/ Project Costs by Year **Project** LSJ-I Program

16-May-02

PROJECT COSTS	Account Codes	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	LIFETIME TOTAL
Salaries and Wages	51110	335,018	1,439,386	1,702,920	565,800	0	4,043,124
Employee Benefits	51xxx	83,755	359,847	425,730	141,450	0	1,010,781
Supplies	52110	2,600	2,600	2,600	2,600	0	10,400
EDP Supplies	52212	0	0	0	0	0	0
Consulting IT Services	53127	0	1,033,850	1,355,850	57,500	0	2,447,200
Subcontract IT Services	53179	0	0	0	0	0	0
Travel	53310	0	5,000	5,000	5,000	0	15,000
Printing	53806	1,200	2,400	2,400	2,400	0	8,400
Training-IT	53813	0	10,000	5,000	10,000	0	25,000
IT - Internal Service	55xxx	10,000	10,000	5,000	10,000	0	35,000
Hardware/Software	56740	20,000	2,676,000	2,500,000	0	0	5,196,000
Communication Equipment	56780	0	0	0	0	0	0
Capital IT Lease - Principal	57303	0	0	0	0	0	0
Capital IT Lease - Interest	57304	0	0	0	0	0	0
Private Auto Mileage	53318	400	1,000	1,000	400	0	2,800
Telcom Serv-Ongoing Chrg	53211	600	1,200	1,200	700	0	3,700
Other (specify)		0	0	0	0	0	0
Other (specify)		0	0	0	0	0	0
TOTAL COST		453,573	5,541,283	6,006,700	795,850	0	12,797,405

Note: See Instructions tab for other pertinent accounts that could be added to this list.

Table 13: Program Costs by Year (Integrated Application)

Form 5/ Benefits Cash Flow Analysis **Project** LSJ-I Program

16-May-02

TANGIBLE BENEFITS	Accounts	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	TOTAL
		BENEFITS										
Hard $												
Revenues (specify)	(account codes)	0	0	0	0	0	0	0	0	0	0	0
												0
												0
												0
												0
Reimbursements (specify)	(account codes)	0	0	0	0	0	0	0	0	0	0	0
												0
												0
												0
												0
Cost Reduction (specify) (1)	(account codes)	0	0	448,084	2,417,248	2,740,104	2,740,104	2,740,104	2,740,104	2,740,104	2,740,104	19,305,956
Salaries and Wages	51110											0
												0
												0
												0
Other (specify)	(account codes)	0	0	0	0	0	0	0	0	0	0	0
												0
												0
												0
												0
Soft $												0
Cost Avoidance (specify)	(account codes)	0	0	0	0	0	0	0	0	0	0	0
IT - Internal Service	55xxx											0
												0
												0
												0
Other (specify)	(account codes)	0	0	0	0	0	0	0	0	0	0	0
												0
												0
												0
												0
TOTAL INFLOWS		0	0	448,084	2,417,248	2,740,104	2,740,104	2,740,104	2,740,104	2,740,104	2,740,104	19,305,956
CUMULATIVE BENEFITS			0	448,084	2,865,332	5,605,436	8,345,540	11,085,644	13,825,748	16,565,852	19,305,956	

(1) Reflect all Cost Reduction Benefits except Operations reductions (which are reflected in Cost of Operations).
(2) Total Inflows carries to Form1

Table 14: Benefits Cash Flow Analysis (Integrated Application)

Form 4/ Current versus Proposed Method Operations Costs **Project** LSJ-I Program

16-May-02

		FY 2002			FY 2003			FY 2004			FY 2005			FY 2006		
OPERATIONS COSTS	Accounts	(a) Current	(b) Project	(c) = (b)-(a) Incremental Effect of Project (to summary)	(a) Current	(b) Project	(c) = (b)-(a) Incremental Effect of Project (to summary)	(a) Current	(b) Project	(c) = (b)-(a) Incremental Effect of Project (to summary)	(a) Current	(b) Project	(c) = (b)-(a) Incremental Effect of Project (to summary)	(a) Current	(b) Project	(c) = (b)-(a) Incremental Effect of Project (to summary)
Salaries and Wages	51110	6,489,157	6,489,157	0	6,813,615	6,813,615	0	7,154,296	7,154,296	0	7,512,010	7,512,010	0	7,887,611	7,887,611	0
Employee Benefits	51xxx	1,921,717	1,921,717	0	2,017,803	2,017,803	0	2,118,693	2,118,693	0	2,224,628	2,224,628	0	2,335,859	2,335,859	0
Supplies	52110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDP Supplies	52212	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consulting IT Services	53127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcontract IT Services	53179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Travel	53310	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Printing	53806	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Training-IT	53813	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IT - Internal Service	55xxx	5,341,601	5,341,601	0	5,341,601	5,341,601	0	5,875,761	5,875,761	0	5,875,761	4,976,632	(899,130)	6,463,337	5,868,045	(595,292)
Hardware/Software	56740	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Communication Equipment	56780	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Capital IT Lease - Principal	57303	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Capital IT Lease - Interest	57304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL OPERATION COSTS		13,752,475	13,752,475	0	14,173,019	14,173,019	0	15,148,750	15,148,750	0	15,612,399	14,713,270	(899,130)	16,686,807	16,091,515	(595,292)
FTE'S				0			0			0		6	6		6	6

		FY 2007			FY 2008			FY 2009			FY 2010			FY 2011		
OPERATIONS COSTS	Accounts	(a) Current	(b) Project	(c) = (b)-(a) Incremental Effect of Project (to summary)	(a) Current	(b) Project	(c) = (b)-(a) Incremental Effect of Project (to summary)	(a) Current	(b) Project	(c) = (b)-(a) Incremental Effect of Project (to summary)	(a) Current	(b) Project	(c) = (b)-(a) Incremental Effect of Project (to summary)	(a) Current	(b) Project	(c) = (b)-(a) Incremental Effect of Project (to summary)
Salaries and Wages	51110	8,281,991	8,281,991	0	8,696,091	8,696,091	0	9,130,896	9,130,896	0	9,587,440	9,587,440	0	10,066,812	10,066,812	0
Employee Benefits	51xxx	2,452,652	2,452,652	0	2,575,285	2,575,285	0	2,704,049	2,704,049	0	2,839,251	2,839,251	0	2,981,214	2,981,214	0
Supplies	52110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDP Supplies	52212	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consulting IT Services	53127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcontract IT Services	53179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Travel	53310	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Printing	53806	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Training-IT	53813	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IT - Internal Service	55xxx	6,463,337	5,868,045	(595,292)	7,109,671	6,394,849	(714,822)	7,109,671	6,394,849	(714,822)	7,820,638	6,974,337	(846,301)	7,820,638	6,974,337	(846,301)
Hardware/Software	56740	0	250,000	250,000	0	200,000	200,000	0	250,000	250,000	0	0	0	0	450,000	450,000
Communication Equipment	56780	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Capital IT Lease - Principal	57303	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Capital IT Lease - Interest	57304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL OPERATION COSTS		17,197,981	16,852,688	(345,292)	18,381,047	17,866,225	(514,822)	18,944,615	18,479,794	(464,822)	20,247,330	19,401,029	(846,301)	20,868,664	20,472,363	(396,301)
FTE'S			6	6		6	6		6	6		6	6		6	6

(1) FY__ Column (c) for each Cost Code carried to Form3

Note: See Instructions tab for other pertinent accounts that could be added to this list.

Table 15: Current vs. Proposed IT Operational Costs (Integrated Application)

APPENDIX E: BUSINESS OPPORTUNITIES AND INCREMENTAL IMPLEMENTATION PROJECTS DEFINITION AND SEQUENCING

The 22 business opportunities were given preliminary numbers (P#) based on if they were quantitative (Tangible) or Qualitative.

P#	Project descriptions from Analysis Report	Applications Involved
T1	Jail Intake and Booking: Electronic submission of booking documents by police to jail	SIP, SeaKing, JJWAN
	Dependency:	IRIS, external
T2	Referral Filing: Electronic submission of police referrals to prosecutor	PROMIS, SIP, SeaKing, NCIC, WASIS
	Dependency:	IRIS, external
T3	Case Results Update: Electronic sharing of updated case status and information	CMIS, JJWAN, PROMIS, SIP, ECR, VINES, Offender Reg
	Dependency:	SCOMIS, ECR, JIS
T4	Electronic Case Filing: Electronically receive, sign, and initiate court cases from Prosecutor	JIS, SCOMIS, DISCIS, ECR
	Dependency:	PROMIS
T5	Improved Warrant Management: Timely and direct warrant information access and management	???
	Dependency:	
T6	District Court Processing: Electronic submission of police information for District Court cases	DISCIS
	Dependency:	external
T7	Public Inquiry Response: Web availability of public court information	SIP, SeaKing, PROMIS, CMIS
	Dependency:	
T8	Jail Disposition Mgmt: Improved access to required program eligibility information	SIP, SeaKing, COMCOR, PTM, CLS
	Dependency:	
T9	Jail Classification: Improved access to required classification information	SIP, SeaKing, PTM, CLS, JIS, SCOMIS, NCIC, etc
	Dependency:	SIP, SeaKing, PTM
T10	Prosecutor Case Filing: Improved creation of filing documents within Prosecutor's Office	PROMIS, MS Word
	Dependency:	PROMIS, SIP
T11	Court Calendaring: Coordinated and computerized court event scheduling and management	PROMIS, CMIS, JKS
	Dependency:	PROMIS, CMIS, JKS
T12	Criminal History Research: Improved access to criminal history information	SIP, SeaKing, PTM, CLS, JIS, SCOMIS, NCIC, etc
	Dependency:	SCOMIS, ECR, JIS
T13	Consolidated Inmate Management: Improve the ability to manage inmates through consolidated functions	SIP, SeaKing, JAMMA, CLS, NRF, JKS, etc
	Dependency:	
T14	Inmate Status Reporting Improvements: Improve ability to develop new/ad hoc reports about inmates	SIP, SeaKing, JAMMA, CLS, NRF, JKS, TempLoc, more
	Dependency:	
Q1	Consolidated Law Enforcement History: Make comprehensive criminal history available in the field	IRIS, external, SIP, SeaKing, SCOMIS, DISCIS, NCIC, etc
	Dependency:	
Q2	Police Investigation Sharing: Develop a consolidated source for current inter-jurisdiction investigations	IRIS, external
	Dependency:	
Q3	Prosecutor's Paperless Case Files: Support the development of electronic prosecutor case files	PROMIS
	Dependency:	
Q4	Updated Referal Status: Share information about referred cases	IRIS
	Dependency:	PROMIS
Q5	Improved Court Status Reporting: Improve ability to develop new/ad hoc reports about court cases and status	CMIS, SCOMIS, DISCIS, PROMIS
	Dependency:	
Q6	Public Safety Info Portal: Make complete public information available to the public	
	Dependency:	
Q7	State Booking Data: Import/Export correctional data with state	SIP, SeaKing
	Dependency:	
Q8	Health Services Coordination: Share inmate information with health services to improved inmate care	SIP, SeaKing
	Dependency:	

Table 16: Identified Business Opportunities

The business opportunities are then jointly prioritized. First, the two types of opportunities are separately prioritized – tangible opportunities are prioritized based on their potential payback, and qualitative opportunities are prioritized based on the group rankings performed by the LSJ BMC Sub-Committee. The opportunities are then scored on a 10-point scale within this ranking. That raw score is then factored, based on whether or not the effort to address this opportunity will require interaction with applications outside the control of King County – opportunities without external dependencies are scored based on a factor of 1.5. The opportunities are then collectively prioritized based on their factored scores.

P#	Project descriptions from Analysis Report	Raw	Ext	Score
T3	Case Results Update: Electronic sharing of updated case status and information	9	N	13.5
T1	Jail Intake and Booking: Electronic submission of booking documents by police to jail	10	Y	10
T2	Referral Filing: Electronic submission of police referrals to prosecutor	10	Y	10
Q1	Consolidated Law Enforcement History: Make comprehensive criminal history available in the field	10	Y	10
T4	Electronic Case Filing: Electronically receive, sign, and initiate court cases from Prosecutor	9	Y	9
Q2	Police Investigation Sharing: Develop a consolidated source for current inter-jurisdiction investigations	9	Y	9
T7	Public Inquiry Response: Web availability of public court information	6	N	9
Q4	Updated Referal Status: Share information about referred cases	6	N	9
T5	Improved Warrant Management: Timely and directly warrant information access and management	8	Y	8
T8	Jail Disposition Mgmt: Improved access to required program eligibility information	5	N	7.5
Q3	Prosecutor's Paperless Case Files: Support the development of electronic prosecutor case files	7	Y	7
T6	District Court Processing: Electronic submission of police information for District Court cases	7	Y	7
Q5	Improved Court Status Reporting: Improve ability to develop new/ad hoc reports about court cases and status	5	Y	5
T10	Prosecutor Case Filing: Improved creation of filing documents within Prosecutor's Office	3	N	4.5
Q6	Public Safety Info Portal: Make complete public information available to the public	4	Y	4
T9	Jail Classification: Improved access to required classification information	4	Y	4
T11	Court Calendaring: Coordinated and computerized court event scheduling and management	2	N	3
T12	Criminal History Research: Improved access to criminal history information	2	Y	2
Q7	State Booking Data: Import/Export correctional data with state	2	Y	2
T13	Consolidated Inmate Management: Improve the ability to manage inmates through consolidated functions	1	N	1.5
T14	Inmate Status Reporting Improvements: Improve ability to develop new/ad hoc reports about inmates	1	N	1.5
Q8	Health Services Coordination: Share inmate information with health services to improved inmate care	1	Y	1

Table 17: Factored Prioritized Opportunities

The opportunities are combined into logical projects based on interrelationships between the operations and supporting applications. These projects are prioritized based on the aggregate score of the opportunities, with a single, small pilot project without any external dependencies identified. Some adjustments may be made during final implementation planning based on conflicts regarding the applications involved, project team assignments, or changing business requirements.

Project Sequencing				
Project	P#	Score	Project descriptions from Analysis Report	Dur
Install	0	-	Baseline deployment - prototype - quick wins	-
Pilot	T3	13.5	Case Results Update: Electronic sharing of updated case status and information	5
1	T1	29	Jail Intake and Booking: Electronic submission of booking documents by police to jail	7
	T2		Referral Filing: Electronic submission of police referrals to prosecutor	
	Q2		Police Investigation Sharing: Develop a consolidated source for current inter-jurisdiction investigations	
2	T12	14	Criminal History Research: Improved access to criminal history information	5
	Q1		Consolidated Law Enforcement History: Make comprehensive criminal history available in the field	
	Q7		State Booking Data: Import/Export correctional data with state	
3	T4	13.5	Electronic Case Filing: Electronically receive, sign, and initiate court cases from Prosecutor	5
	T10		Prosecutor Case Filing: Improved creation of filing documents within Prosecutor's Office	
4	T7	13	Public Inquiry Response: Web availability of public court information	5
	Q6		Public Safety Info Portal: Make complete public information available to the public	
5	T8	11.5	Jail Disposition Mgmt: Improved access to required program eligibility information	5
	T9		Jail Classification: Improved access to required classification information	
6	Q4	9	Updated Referal Status: Share information about referred cases	4
7	T5	8	Improved Warrant Management: Timely and directly warrant information access and management	4
8	T11	8	Court Calendaring: Coordinated and computerized court event scheduling and management	5
	Q5		Improved Court Status Reporting: Improve ability to develop new/ad hoc reports about court cases and status	
9	Q3	7	Prosecutor's Paperless Case Files: Support the development of electronic prosecutor case files	5
10	T6	7	District Court Processing: Electronic submission of police information for District Court cases	5
11	T13	3	Consolidated Inmate Management: Improve the ability to manage inmates through consolidated functions	4
	T14		Inmate Status Reporting Improvements: Improve ability to develop new/ad hoc reports about inmates	
12	Q8	1	Health Services Coordination: Share inmate information with health services to improved inmate care	3

Table 18: Project Definition and Sequencing

With 14 incremental projects defined and prioritized, the projects were then individually scoped to determine implementation costs, with the costs of the projects totaled to determine final implementation costs.

Project Scoping				
Project	**Project descriptions from Analysis Report**	**FTE**	**Dur**	**Cost**
Install	Install simple integration solution	14	-	**$ 1,100,550**
Pilot	Case Results Update: Electronic sharing of updated case status and information	18	5	**$ 1,153,450**
1	Jail Intake and Booking: Electronic submission of booking documents by police to jail Referral Filing: Electronic submission of police referrals to prosecutor Police Investigation Sharing: Develop a consolidated source for current inter-jurisdiction investigations	7	7	**$ 1,255,800**
2	Criminal History Research: Improved access to criminal history information Consolidated Law Enforcement History: Make comprehensive criminal history available in the field State Booking Data: Import/Export correctional data with state	7	5	**$ 431,250**
3	Electronic Case Filing: Electronically receive, sign, and initiate court cases from Prosecutor Prosecutor Case Filing: Improved creation of filing documents within Prosecutor's Office	10	5	**$ 586,500**
4	Public Inquiry Response: Web availability of public court information Public Safety Info Portal: Make complete public information available to the public	7	5	**$ 897,000**
5	Jail Disposition Mgmt: Improved access to required program eligibility information Jail Classification: Improved access to required classification information	8	5	**$ 483,000**
6	Updated Referal Status: Share information about referred cases	7	4	**$ 345,000**
7	Improved Warrant Management: Timely and directly warrant information access and management	10	4	**$ 469,200**
8	Court Calendaring: Coordinated and computerized court event scheduling and management Improved Court Status Reporting: Improve ability to develop new/ad hoc reports about court cases and status	10	5	**$ 586,500**
9	Prosecutor's Paperless Case Files: Support the development of electronic prosecutor case files	8	5	**$ 483,000**
10	District Court Processing: Electronic submission of police information for District Court cases	7	5	**$ 897,000**
11	Consolidated Inmate Management: Improve the ability to manage inmates through consolidated functions Inmate Status Reporting Improvements: Improve ability to develop new/ad hoc reports about inmates	7	4	**$ 345,000**
12	Health Services Coordination: Share inmate information with health services to improved inmate care	8	3	**$ 289,800**
				$ 9,323,050

Table 19: Incremental Project Cost Analysis Breakdown

APPENDIX F: PROPOSED PROGRAM ORGANIZATION AND GOVERNANCE

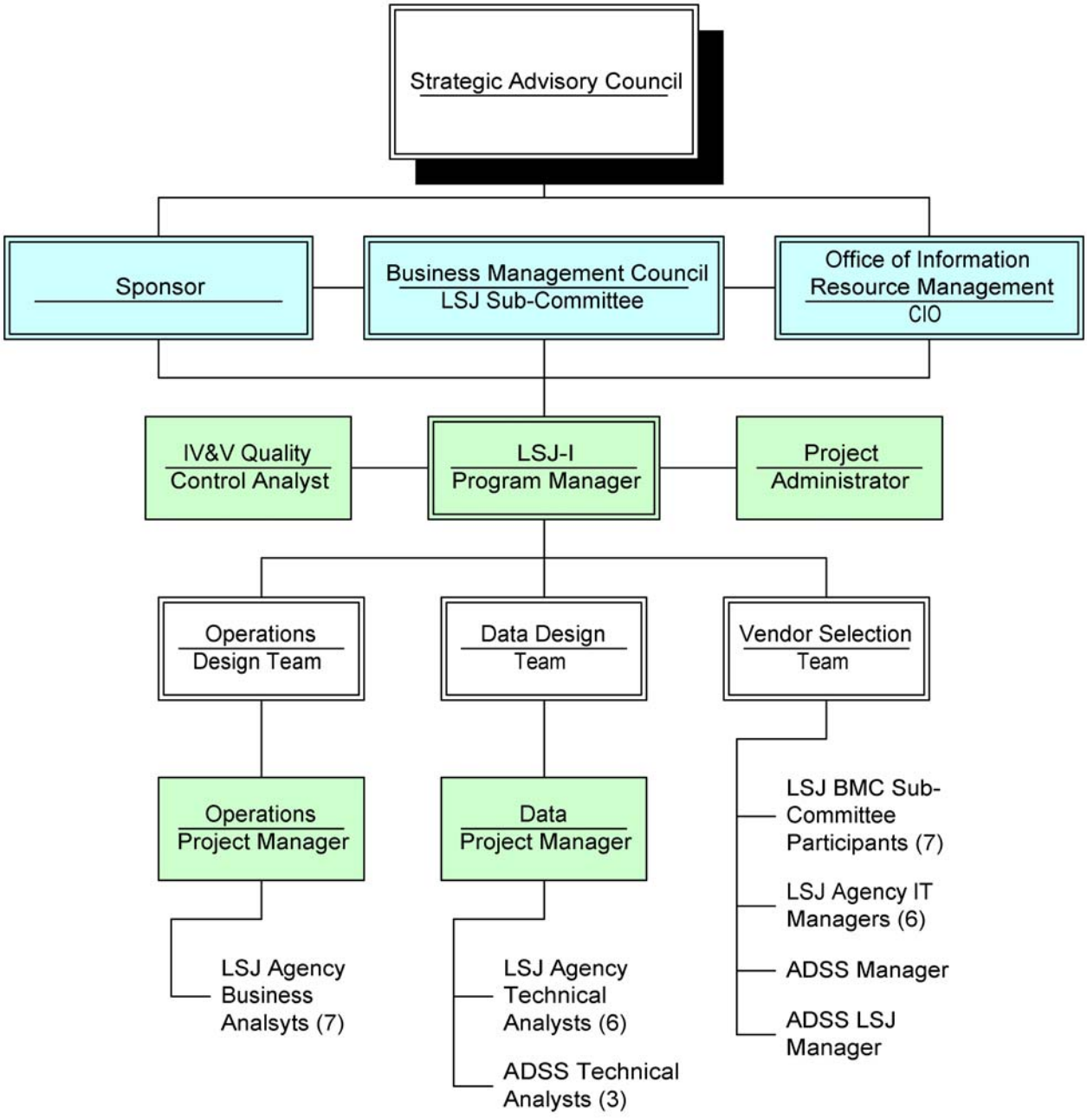

Figure 6: Phase I Program Organization

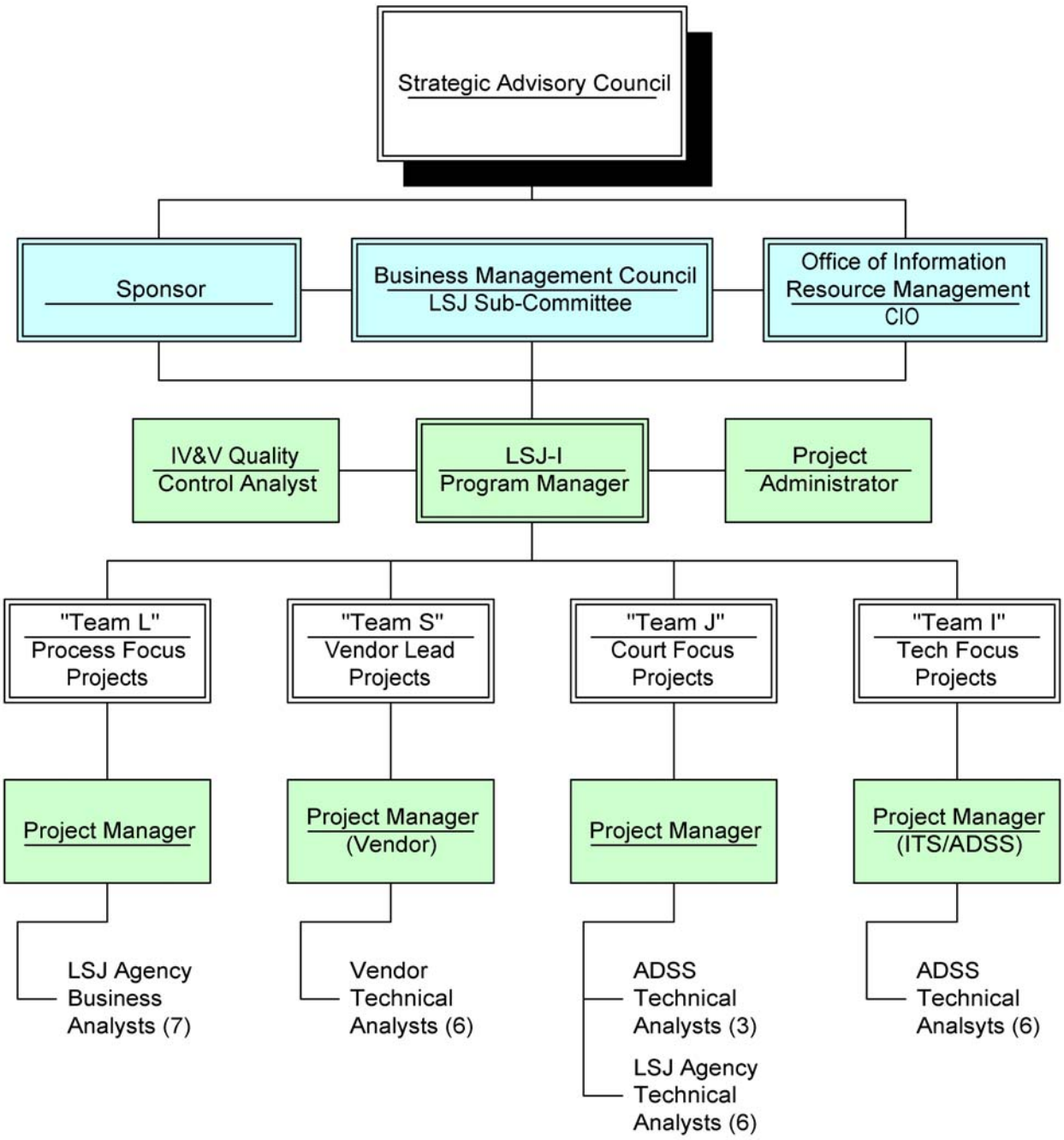

Figure 7: Phase II-III Program Organization for Middleware Integration

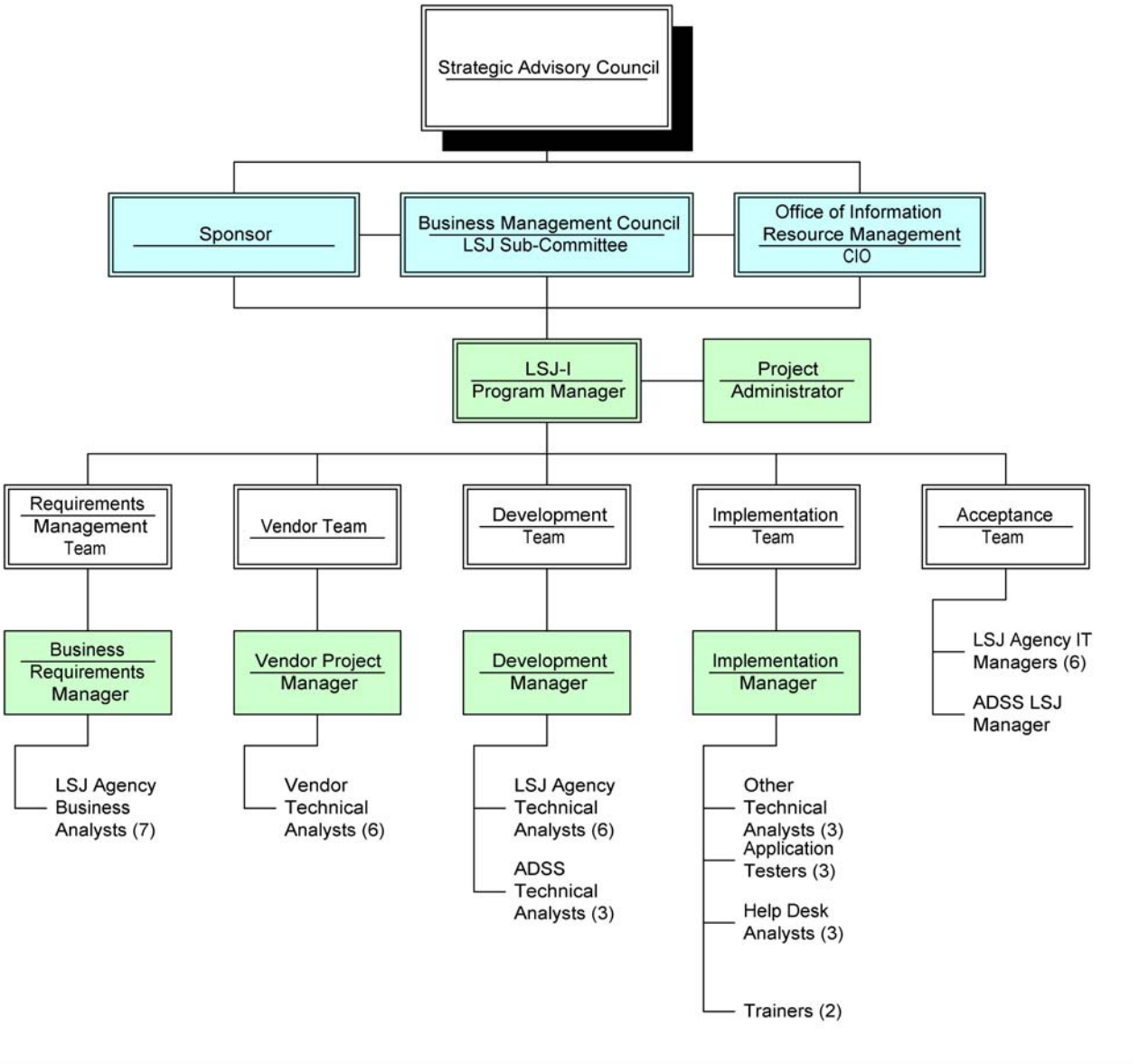

Figure 8: Phase II-III Program Organization for Integrated Application

APPENDIX G: GLOSSARY

A2A – Application-to-application. An abbreviation relating to a transaction or interaction between two applications.

ASP – 1) Active Server Pages: A scripting environment for Microsoft IIS in which you can combine HTML, scripts, and reusable server components to create dynamic web pages; 2) Application Service Provider: A service (usually a business) that provides remote access to an application through a network, typically the Internet.

B2B – Business-to-business. An abbreviation relating to a transaction or interaction between two businesses.

BMC – Business Management Council. A council comprised of Directors and Managers, created as part of the information technology governance structure under County Ordinance 14155.

CCN – Criminal Control Number. The primary key for identifying an individual within SIP, SEAKING, and all interrelated applications within King County's detention systems.

CICS – Customer Information Control System. An online transaction processing (OLTP) program from IBM that, together with the COBOL programming language, represents the most common set of tools for building customer transaction applications in the world of large enterprise mainframe computing. CICS has been a standard for several decades.

Client/Server – The model of interaction in a distributed computing system in which a program at one site sends a request to a program at another site and awaits a response. The requesting program is called a client; the program satisfying the request is called the server.

COM – Component Object Model. An open software architecture from Microsoft and DEC.

CORBA – Common Object Request Broker Architecture. An architecture and specification for creating, distributing, and managing distributed program objects in a network. It allows programs at different locations and developed by different vendors to communicate in a network through an "interface broker."

COTS – Commercial Off-The-Shelf product. Refers to an IT application that is purchased from a vendor and implemented with (presumably) limited programming or customization required.

DAJD – Department of Adult and Juvenile Detention.

Data warehouse – A database application that typically stores data and information already retained in multiple disparate systems. The data warehouse consolidates the data into a central repository, reorganizes the data, and establishes new relationships between the data to support new applications or new decisions support and analysis functions.

DISCIS – DIStrict Court Information System. A state application used by King County to support District Court activities.

DJA – Department of Judicial Administration.

EAI – Enterprise Application Integration. IT industry term for the effort of integrating applications within an enterprise.

ENS – Enterprise Nervous System; a new industry term coined by Gartner in 2001. An ENS is a middleware platform (the "integration infrastructure" or "intelligent network") that continuously monitors the state of the heterogeneous enterprise and its relevant partners. It then transmits information or initiates processes based on the relevance of the information, managing and coordinating differences in the form, origin, architectural style or location of the participating applications or data stores. The fundamental components of the ENS platform include integration brokers, business process managers, communication middleware (including message queuing middleware, e-mail and publish-and-subscribe middleware), adapter technologies including data and application adapters, web integration servers, application servers, and data integration tools.

Enterprise – Any logical organization that comprises a "going concern." The term typically refers to an entire company (as opposed to a single department or division), but may also refer to a government organization, or multiple companies operating as a conglomerate or supply chain.

Enterprise JavaBeans (EJB) – A server-side component architecture for writing reusable business logic (objects) and portable enterprise applications. EJB components are written entirely in Java and run on any EJB compliant server. Theoretically, they are operating system, platform, and middleware independent.

ERP – Enterprise Resource Planning. A market category of COTS applications designed to support and automate the business processes of medium and large businesses, typically including manufacturing, distribution, personnel, project management, payroll, and financials. Examples are PeopleSoft, SAP, Oracle Financials, and JD Edwards.

FTE – Full Time Equivalent. A (some would say theoretical) model for defining work performed by employees. While calculations vary and therefore do not equate to actual work hours, typical equivalents are 8 hours per business day, 40 hours per standard work week, 160 hours per month, and 2,000 hours per year. The work does not have to be performed by a single individual. (For example, if five different individuals all perform a task, and their total effort on that task equals 40 hours a week, then the task requires 1 FTE.)

Gap analysis – An analysis technique for evaluating IT products based on the business and functional requirements of the customer or end users.

GUI – Graphical User Interface. Computer industry term for a user screen presented in a "WYSIWYG" configuration (what-you-see-is-what-you-get), as opposed to a simple

character-based or "green-screen" configurations. GUI is often associated with web browser interfaces or PC-based client/server applications.

Horizontal integration – Within the justice industry, the integration of applications across multiple operations but within a single layer of government (for example, integrating the systems of King County's Sheriff, Prosecutor, Superior Court, and Detention units).

Hub-and-spoke – An integration architecture in which applications do not directly exchange information with each other. Instead, they exchange data only with a central system, which acts as a distribution and communications hub.

ITS – Information and Telecommunications Services. The Division within the Department of Executive Services that manages the core IT infrastructure of King County.

Integration – 1) Within the justice community, integration is defined as the electronic sharing of information by two or more distinct justice entities within a system. 2) Within the IT industry, integration is the interconnection of two or more applications so that the applications share data, resources, and/or functionality.

J2EE – Java 2 Enterprise Edition. A Java platform for multi-tier server-oriented enterprise applications. The basis of J2EE is Enterprise JavaBeans (EJB).

JIS – Justice Information System. A Washington State application that contains the personal and demographic information about individuals.

JJWAN – Juvenile Justice Wide Area Network. King County's main application supporting juvenile court and detention, soon to be replaced by JJWEB.

JIN – Justice Information Network. The working community for Washington State's integration efforts.

LAN – Local Area Network. Any physical network technology designed to span short distances (up to a few thousand feet), typically limited to a single physical location. Usually, LANs operate at tens of megabits per second through several gigabits per second.

LegalXML – Both the name of the standard for using XML within the law and justice industry, and the name of the organization that developed and manages the standard.

Legacy – Broadly speaking, a legacy application is any application that is not under development and currently supports production operations. The term is usually applied to "old" applications that are: a) based on a mainframe or midrange platform; b) written in "older" computer languages like COBOL, Natural, C, or FORTRAN; c) are designed to support only point-to-point interfaces; d) use flat file records rather than relational databases; and/or e) were originally intended to be accessed using "dumb" terminals.

Legacy extension – IT industry term for any of a variety of activities that, in the end, result in the continued use of a legacy system while presenting to the user a browser-based "web" or "GUI" interface accessed from a PC.

LSJ community – The collection of agencies and departments that make up the King County "Law, Safety and Justice" operation. It includes the King County Sheriff, the King County Prosecutor, Superior Court, District Court, the Department of Judicial Administration, the Department of Adult and Juvenile Detention, and the Office of the Public Defender.

Mainframe – An industry term for a large computer, typically manufactured by a large company such as IBM, for the commercial applications of Fortune 1000 businesses and other large-scale computing purposes. Historically, a mainframe is associated with centralized rather than distributed computing. The designation is often used interchangeably – and incorrectly – with "legacy."

Middleware – Software that manages the interaction between disparate applications across the heterogeneous computing platforms. There are many different types of middleware solutions, based on the goal of the interaction between applications.

MQ – A type of middleware software, produced by IBM.

.NET – Microsoft's marketing designation for their collection of products that support Web Services. The .NET product suite includes servers, building-block services, development tools, and device software.

NCIC – The federal government's criminal information application.

OEM – Original Equipment Manufacturer. A company that repackages equipment, such as computers, made by other companies. An OEM does not necessarily add anything except their name to the product. In some cases though they may integrate components into complete systems. (Example: Compaq is an OEM, which packages hardware made by Intel and others, and software made by Microsoft and others, into a ready-to-use PC.)

OIRM – Office of Information Resource Management.

PAO – Prosecuting Attorney's Office.

PCN – Process Control Number. The primary key for identifying event-related information within Washington State's justice systems.

Point-to-point – An integration architecture in which applications directly exchange information with each other. This is a simple method for quickly achieving direct connection between applications, but becomes complex and difficult under a many-to-many integration scenario.

Powerbuilder – A development tool from Powersoft, used to build application interfaces within a client/server environment.

PROMIS – PROsecutor Management Information System. The core application used by the King County Prosecuting Attorney's Office.

Protocol – A set of formal rules describing how to transmit data. Low-level protocols define the electrical and physical standards to be observed. High-level protocols deal with the data formatting, sequencing of messages, etc.

RDBMS – Relational DataBase Management System. A relational database allows the definition of data structures, storage and retrieval operations, and integrity constraints. In such a database the data and relations between them are organized in tables. A table is a collection of records and each record in a table contains the same fields.

ROI – Return On Investment.

SCOMIS – Superior Court Management Information System. A state application used by King County to support Superior Court activities.

SEARCH – A non-profit research group funded primarily by grants from the Office of Justice Programs, within the U.S. Department of Justice; also called The National Consortium for Justice Information and Statistics.

SeaKing – A DAJD application that contains demographic information of every person processed within the King County detention unit. It was originally acquired from Kansas City circa 1971.

SIP – Subject In Process. The core application used by the King County Department of Adult and Juvenile Detention.

SAC – Strategic Advisory Council. A council comprised of Directors and Elected Officials, chaired by the King County Executive, created as part of the information technology governance structure under County Ordinance 14155.

SOAP – Simple Object Access Protocol. SOAP lets one application invoke a remote procedure call (RPC) on another application or pass an object to a remote location using an XML message and the Internet. SOAP satisfies the need for business partners to exchange structured data over the Internet independently of each other's underlying application platform. It is designed to let organizations publish data and services over the Internet as easily as they can publish HTML pages.

SOP – Summary Offender Profile. An application currently under development by Washington State, intended to be the comprehensive statewide criminal history system.

STP – 1) Strategic Technology Plan: King County's abbreviation for the plan developed and managed by OIRM. 2) Straight-Through Processing: The idea, methodology, and technology of capturing discrete units of data and information once and only once, and then processing that information from that beginning point all the way through to its endpoint, without any other manual intervention and regardless of the number or location of systems required to complete the transaction.

Superform – A document created by a law enforcement agency to both refer a case to the King County Prosecutor and provide suspect information to the King County Jail for booking.

SWOT – Strengths, Weaknesses, Opportunities, Threats. A structured method of analyzing business opportunities based on four criteria.

TCO – Total Cost of Ownership. A type of calculation designed to help assess both direct and indirect costs and benefits related to the purchase of any technology component.

UDDI – Universal Description, Discovery, and Integration. UDDI has been simply described as a yellow pages directory for Web Services. Introduced in mid-2000 by Microsoft, Ariba, and IBM, it is a framework for automatically handling B2B transactions, electronic commerce, and Web Services. The framework lets organizations describe themselves and their product or service offerings, explain how they wish to conduct business over the Internet, and search for compatible partners or customers. This information is published in a UDDI Registry that is open to everyone. The UDDI Business Registry is an XML-enabled B2B "telephone directory" that consists of geographically separate individual "registries" that operate as a single logical Registry. The Registry provides a common B2B integration infrastructure with standard formats for describing and discovering Web Services and transacting business. Information is exchanged using open technologies like SOAP, HTTP, TCP/IP, and the Internet Domain Name System (DNS). Although XML is the registry's lingua franca for describing services, the actual services themselves may be created in any format or language.

Vertical integration – Within the justice industry, the integration of applications across multiple layers of government but within a single function (for example, integrating the systems of the Seattle Police, King County Sheriff, and Washington State Patrol).

W3C – World Wide Web Consortium. The main standards body for the Internet. W3C works with the global community to establish international standards for client and server protocols that enable online commerce and communications on the Internet. W3C was created by the Massachusetts Institute of Technology (MIT) on October 25, 1994.

Web Services – An industry term for the collection of emerging technologies that support direct interaction between independent computer systems. The technologies generally assembled to support Web Services are XML, SOAP, WSDL, and UDDI.

WSDL – Web Services Description Language. An XML vocabulary that standardizes how organizations describe and discover Web Services listed in the UDDI. WSDL is based on Microsoft's SOAP Contract Language and IBM's Network Accessible Service Specification Language (NASSL). In March 2002, over 20 vendors submitted WSDL to the W3C XML Protocol group as a W3C Note.

XML – eXtensible Markup Language. A standard developed by the W3C for exchanging data. It is based on creating definitions for data tags, tagging data according to those definitions, and transmitting the tagged data as text files.

ZLE – Zero Latency Enterprise. The idea, methodology, and technology of making possible instantaneous, or near real-time, updates and access to discrete data and information wherever and whenever needed by any authenticated human or application in the enterprise for whatever authorized use, at any point of need, at the time needed.